#### PREFATORY NOTE

These transcripts have been produced from the original raw transcripts in the FOMC Secretariat's files. The Secretariat has lightly edited the originals to facilitate the reader's understanding. Where one or more words were missed or garbled in the transcription, the notation "unintelligible" has been inserted. In some instances, words have been added in brackets to complete a speaker's thought or to correct an obvious transcription error or misstatement.

Errors undoubtedly remain. The raw transcripts were not fully edited for accuracy at the time they were produced because they were intended only as an aid to the Secretariat in preparing the records of the Committee's policy actions. The edited transcripts have not been reviewed by present or past members of the Committee.

Aside from the editing to facilitate the reader's understanding, the only deletions involve a very small amount of confidential information regarding foreign central banks, businesses, and persons that are identified or identifiable. Deleted passages are indicated by gaps in the text. All information deleted in this manner is exempt from disclosure under applicable provisions of the Freedom of Information Act.

# Meeting of the Federal Open Market Committee

# June 29-30, 1988

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D. C., on Wednesday, June 29, 1988, at 3:00 p.m. and continuing on Thursday, June 30, 1988, at 9:00 a.m.

PRESENT: Mr. Greenspan, Chairman

Mr. Corrigan, Vice Chairman

Mr. Angell

Mr. Black

Mr. Forrestal

Mr. Heller

Mr. Hoskins

Mr. Johnson

Mr. Kelley

Mr. Parry

Ms. Seger

Messrs. Guffey, Keehn, Melzer, and Morris, Alternate Members of the Federal Open Market Committee

Messrs. Boehne, Boykin, and Stern, Presidents of the Federal Reserve Banks of Philadelphia, Dallas, and Minneapolis, respectively

Mr. Kohn, Secretary and Economist

Mr. Bernard, Assistant Secretary

Mr. Bradfield, General Counsel

Mr. Patrikis, 1/ Assistant General Counsel

Mr. Prell, Economist

Mr. Truman, Economist

Messrs. Broaddus, J. Davis, R.Davis, Lindsey, Siegman, Simpson, Slifman, and Ms. Tschinkel, Associate Economists

Mr. Sternlight, Manager for Domestic Operations, System Open Market Account

Mr. Cross, Manager for Foreign Operations, System Open Market Account

<sup>1/</sup> Attended Thursday's session only.

- Mr. Coyne, Assistant to the Board, Board of Governors
- Mr. Ettin, Deputy Director, Division of Research and Statistics, Board of Governors
- Mr. Promisel, Senior Associate Director, Division of International Finance, Board of Governors
- Mr. Keleher, Assistant to Governor Johnson, Office of Board Members, Board of Governors
- Mr. Wajid, Assistant to Governor Heller, Office of Board Members, Board of Governors
- Messrs. Rea 1/ and Whitesell, Economists, Division of Monetary Affairs, Board of Governors
- Mr. Oliner, 1/ Economist, Division of Research and Statistics, Board of Governors
- Ms. Low, Open Market Secretariat Assistant, Division of Monetary Affairs, Board of Governors
- Mr. Thomson, Executive Vice President, Federal Reserve
  Bank of San Francisco
- Messrs. Balbach, T. Davis, Rolnick, Rosenblum, and Scheld, Senior Vice Presidents, Federal Reserve Banks of St. Louis, Kansas City, Minneapolis, Dallas, and Chicago, respectively
- Messrs. McNees and Meyer, Vice Presidents, Federal Reserve Banks of Boston and Philadelphia, respectively
- Ms. Krieger, Section Chief, Open Market Function, Federal Reserve Bank of New York

Attended portion of meeting related to consideration of the Committee's longer-run objectives for monetary and debt aggregates.

# Transcript of Federal Open Market Committee Meeting of June 29-30, 1988

June 29. 1988--Afternoon Session

CHAIRMAN GREENSPAN. Good afternoon, everyone. Before we get started, I think you're all aware that all of this paraphernalia around here is for our once-a-decade picture. So I presume everyone's hair is appropriately combed or constructively disarrayed. Secondly, we have dinner this evening at the British Embassy and I assume that everyone has [arranged] transportation appropriate to their needs; if not, shout, and we'll get that all done. Well, let's get the minutes of the May 17th meeting out of the way. Would somebody like to move them?

VICE CHAIRMAN CORRIGAN. I will move it.

CHAIRMAN GREENSPAN. Do I hear a second?

SEVERAL. Second.

CHAIRMAN GREENSPAN. Without objection, I assume they are approved. Sam Cross usually has very little to say, but today I suspect he's got a lot on his agenda. Sam?

MR. CROSS. Well, it's been an interesting period, Mr. Chairman. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Are there any questions for Mr. Cross?

MR. BOEHNE. I have a couple of questions. What kinds of consultations and cooperation, or lack of cooperation, currently exist among major central banks of the world on these recent interventions? And a related question is what are we trying to accomplish with what we're doing or what we're not doing?

MR. CROSS. We have had consultations with the other central banks and we've talked with them quite frequently every day. But we don't always have the same view of what's happening in the market or what should be done in response. I mentioned in my report that the Germans specifically had been quite concerned about the decline in the exchange rate for the mark, which they feel has inflationary implications for them, particularly with what they see as excessive liquidity in their economy. They think it is neither good for them, nor for the monetary system more broadly, for the mark to be declining as it has been declining under the circumstances. The dollar/mark rate has changed from its low point in January by about 26 pfennigs, which is more than 15 percent. And as a surplus country, they feel as though they should not be in a situation with the mark declining; they're a bit concerned about that.

Our own activity has been aimed not at trying to drive the dollar down; no one wants to do that. But equally, it seems to me, we do not have an interest in seeing the dollar move up to unsustainable levels and then see it fall again. Our view is that a substantial amount of what is going on now is indeed a covering of shorts. We hear a lot of talk about what's happening in the options market. We hear a lot of talk about hedging operations by investors here and

elsewhere. And we think that a lot of this is a covering of short positions which were built up over the past several months at the time when the market view was that the authorities would not let the dollar rise. And therefore, [market participants] could pretty well have a one-way bet on which way to hedge. Once this gets cleared out, we still have a huge deficit, and we still have all these other factors that have to be dealt with. I don't think anybody thinks we're out of the woods at this point. So our efforts in the intervention activities and the other activities we've undertaken have been partly to give ourselves some more currencies. Those currencies could become very useful in future months when we could very well be needing them in order to help support the dollar. [The intervention sales also were undertaken] to show some resistance to the rise in the dollar, so as not to let it get to levels which are simply going to be unsustainable -- because service problems could well disrupt the market That's how I would [unintelligible]. We have operated, as I say, only in deutschemarks, not in yen where the movements have been much less.

## CHAIRMAN GREENSPAN. Any further questions?

VICE CHAIRMAN CORRIGAN. Just a further comment. From my own perspective, in this period of the last week or 10 days or so-leaving aside any particular exchange rate question--I regret that we have not taken greater opportunity in these circumstances to accumulate balances in yen or marks or both. If you take a long view, it's awfully hard to see that the fundamentals have changed in any material way. The trade deficit is still there; the current account deficit is still there. We still are going to have to finance, over the next 4 years or 5 years, cumulative current account deficits of \$400 or \$500 billion. And to the extent there are risks over time, I think they still lie elsewhere. I personally regret that we have not taken the opportunity--even if we choose not to use them--to accumulate some balances in this period.

CHAIRMAN GREENSPAN. Well, that's actually what we're trying to do. We would be in yen now if the Ministry of Finance were favorably disposed to our doing that. But I think, as Sam Cross points out, in this type of market, which is essentially a short-covering market, one would have to react downward; the [unintelligible] of the rise probably delimits the extent of the subsequent decline. And any accumulation of currencies puts us in a position where we don't have to swap or obtain foreign currencies by other means. I personally would like to see us pick up a couple of billion dollars a year. I'm not sure that we can; and I'm not sure that we can without having other market effects. But to the extent that there's a lot of short covering and rapid runups, rather than all of the central bank sales of dollars occurring other than from the United States, I think it's useful for us to get at least a part of that. And I think we're trying to.

MS. SEGER. I think this question is related. I'm never quite sure about the decision-making process. Is the quarterback on these decisions the Secretary of the Treasury? Are Treasury officials the ones who decide the point at which to go in, or were we doing it based on the suggestion of the Bundesbank? I just missed that.

CHAIRMAN GREENSPAN. Technically, it's a joint venture. In principle, the interpretation of the Constitution puts the Secretary of the Treasury as essentially speaking for the President--as the quarterback, as you put it. However, in the huddle, so to speak, we get a lot to say. And in many instances we recommend the plays. And I would think that we've been pretty much on line. In other words, if Sam Cross has a particular point of view--if he likes a specific strategy--more often than not we can convince Treasury that that's appropriate to do and get the authorization.

MS. SEGER. Thank you.

CHAIRMAN GREENSPAN. Lee.

MR. HOSKINS. Is the perception by central banks that this is a technical problem, rather than a change in trade balances that is a surprise or a change in monetary policy?

MR. CROSS. Well, there have been changes in monetary policy which were intended to support some moves that have taken place. But certainly we hear a great deal to suggest that a large part of this is indeed short covering in one form or another--be it dehedging by investors. All of last year Japanese investors bought a lot of U.S. dollar-denominated assets, but they hedged a lot of dollar-denominated assets. And some of those hedges have been eliminated.

Also, we've been hearing for a long time that corporations have been holding off entering the market. As the rate has moved up, there has been the need to buy some dollars in order to meet their needs and their requirements. But certainly it's our view that a very large amount of this is of the nature, in one form or another, of covering options and other hedging. The holders of those short dollar positions became worried at times when they saw that the dollar was moving up. And when they detected that, they did decide to short [unintelligible] immediately to keep the dollar from rising.

MR. JOHNSON. You say they didn't decide to short?

MR. CROSS. Well, because it has become costly.

 $$\operatorname{MR}.$$  JOHNSON. Because the dollar was under upward pressure, right?

MR. CROSS. The dollar was under upward pressure, and also there was a view that the dollar could go up farther and that the authorities would not hold it. I think it was, in part, a change in their perception about what the authorities' attitudes were going to be.

MR. JOHNSON. I'm just saying that some fundamental--

MR. CROSS. If the dollar hadn't risen, then there wouldn't have been any need to short [unintelligible].

MR. JOHNSON. Well, that's the point I meant.

MR. CROSS. Sure.

MR. JOHNSON. Something caused that to happen.

MR. CROSS. No, as I said at the beginning, there has been a firm undertone to the dollar because of some improvement in the trade figures embedded in the changes and a changing view of Federal Reserve policy. There already was a firm undertone, but this view about what the authorities would do popped up last week.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Up until the recent change in [official] rates by the Germans and also the English, hadn't the change in relative [market] rates in support to our dollar grown stronger?

MR. CROSS. If you look at the change in short-term interest rate differentials, the differentials have gotten much narrower vis-avis the mark since the last meeting.

MR. TRUMAN. I think you're right. The first part of the period and before the last meeting they were moving the other way.

MR. CROSS. That's right.

MR. TRUMAN. And they moved back over the short and long ends in the last couple of weeks.

CHAIRMAN GREENSPAN. Particularly since they moved--

MR. TRUMAN. To some [extent] that's a reaction of the market—the other side of what's going on in the exchange market. It's difficult to disentangle the movement that's essentially the [unintelligible] from the exchange rate expectations.

MR. PARRY. I guess the point is that there is some fundamental basis for what happened to the dollar. I mean it's not--

MR. CROSS. I wasn't trying to suggest that nothing has happened in the dollar.

MR. TRUMAN. We're just distinguishing between the period up to the Summit, if you want to put it that way-during which there was a gradual movement-and what came after that, whether kicked off by the Summit communique or other factors or sort of a general sense of reassessing these factors and what they implied for longer-term trends. But we've had the phenomenon of short covering, and that in itself could--

CHAIRMAN GREENSPAN. President Guffey.

MR. GUFFEY. Maybe a structural question, Mr. Chairman. Do we have any limiting factors as to how much foreign currency we can accumulate ourselves as opposed to for the Treasury?

MR. CROSS. We have a limit. I think we're way below that.

MR. GUFFEY. Well, isn't it--

MR. TRUMAN. We have these informal limits of 12--

MR. CROSS. \$12 billion.

MR. TRUMAN. \$12 billion, but because the evidence--

MR. GUFFEY. Set by this Committee?

MR. CROSS. Set by this Committee, right. It's an informal understanding set by this Committee, so it is formal [in that sense]. But we are well below those numbers and we're not likely to--

MR. GUFFEY. Is there a limiting factor as to how much the Treasury can accumulate?

MR. CROSS. Only just that they--the classes of [unintelligible]. But they've got to have--

MR. GUFFEY. Money?

MR. CROSS. That's right, to offset the foreign currency counterpart. But there are ways of doing it.

MR. TRUMAN. They could work--

MR. CROSS. There are innumerable ways to work out arrangements whereby both the Treasury's and the Federal Reserve's foreign currency balances could be increased.

MR. TRUMAN. There are also [unintelligible], of course, the Committee's Procedural Instructions, which limit the amount of operations within daily and--

MR. CROSS. We have daily currency limits, intermeeting period limits, and all of those.

MR. TRUMAN. It works on both sides.

 $\,$  MR. CROSS. We haven't reached any of those during this period.

CHAIRMAN GREENSPAN. Governor Angell.

MR. ANGELL. Sam, you didn't mean--and I presume President Corrigan didn't mean--when talking about the fundamentals, that there isn't a change in fundamentals when for 18 months the monetary aggregate growth rates in the United States have been approximately 1/2 of the growth rates of other major G-10 countries. You would call that a fundamental that might be showing through, would you not?

MR. CROSS. What I was saying was that, obviously, there have been a lot of changes that have occurred in the period, including what has happened to our trade [balance] and all the rest.

MR. ANGELL. So you would include the fact that the trade balance does seem to be moving in the right direction as a change in the fundamentals, wouldn't you?

MR. CROSS. I would indeed. But all I was saying was that even with that improvement, we still have very, very large trade and

current account deficits that have got to be financed. It has changed; there's no question about that. It has shown some improvement.

MR. ANGELL. But you would also conclude, I presume, that the interest rate differentials that are necessary in a period of sustained dollar depreciation would be quite different from the interest rate differentials necessary if market expectations [changed] in regard to either the rate, a change of depreciation, or perceptions of stability, would you not?

MR. CROSS. I don't know--I'm not sure how to answer your question. Obviously, interest rates are a factor in determining the strength of the dollar. And changes in differentials--certainly I wouldn't say they are not significant as well. I think they are--

MR. TRUMAN. Actually, Governor Angell, I think implicitly in his report Sam said that, because there was a growing sense of exchange rate stability during the first part of the period. [Funds] were, therefore, then moved into the higher interest rate currencies. This is consistent with your proposition—if there was exchange rate stability it [unintelligible] shift from pressure on one or more rates. You would expect to see some adjustment in interest rates and that's simply what Sam is saying in response to President Parry's question and yours. The question is how firmly held those expectations are and how long they're going to be sustained.

MR. ANGELL. I did not mean my questions and accompanying comments to indicate that I did not believe that there cannot be an overshooting in regard to a rebound from a previous situation. It would seem to me that one would expect that such sustained rates of depreciation of the dollar against other currencies over such a long period of time would not be followed by a period of everything stabilizing, but by some period of volatility. So I don't mean to suggest that I am out of step with the notion that maybe it would be appropriate to accumulate some balances if one can do that without creating the impression that the dollar's upside potential is very, very low--which could recreate this one-way bet that we've seen for such a long time. I think it's a very delicate matter.

MR. CROSS. We've been trying to operate so as not to give an impression that we are capping the dollar, and we have been urging the Europeans to operate in a way which would not give an impression that we were putting caps on the dollar at a particular level. We have been offering some resistance, but we've been trying to do it in a moderate way. There's an old Scottish golfer's prayer, you know, "May God give me the strength to hit easy." It's an effort to try to resist, not to absolutely assure that we're trying to cap the exchange rate. That's certainly not what we're trying to do.

MR. ANGELL. Indeed, you've done that. And my comments are not at all a criticism of the Desk's actions. I just couldn't quite sit still with some of the comments I heard.

MR. CROSS. Yes. But it's certainly true that during the period when the dollar has been stable, as Ted said, the investors have become very conscious of interest rate differentials and the attractiveness not only of the U.S. dollar, but the Canadian dollar,

the Australian currency, and various other currencies where the nominal interest rates are quite attractive.

CHAIRMAN GREENSPAN. I think he's trying to say, "Don't shank".

MR. FORRESTAL. Sam, there was an article in <u>The New York Times</u> either today or yesterday which suggested, as I read it, that there was really a pretty deep cleavage between the European central banks on the one hand, and the United States and Japan on the other, with respect to intervention. Reading between the lines, I wondered whether the European central banks are really urging us to cap the dollar. Do you get any sense that-

MR. CROSS. Well, I think the Germans in particular are much more troubled about what they see as the problem of a depreciating mark. They're very conscious of that. And they think the inflationary implications of excessive liquidity at home, which they think [unintelligible] plus a depreciating currency are very bad. They think it is bad from the point of view of international adjustment to have a big surplus country like Germany having a depreciation in its currency. They're very conscious of that and they view the problem from that perspective. We view it from a different perspective. Inevitably, we're going to have those differences of view.

CHAIRMAN GREENSPAN. Any further questions for Mr. Cross?

MR. HOSKINS. Just a comment. I guess I'd feel remiss, since I complained on the downside of the dollar that I didn't see the gains from intervention, if I didn't make the same complaint with respect to the upside on the dollar. That's no criticism of the operation of your Desk, it's more a question about what we're trying to do with policy in terms of currency intervention. My concern is as to uncertainty in the market rather than smooth outlooks and also that we might convince ourselves, perhaps, that we can do more than we really can do.

MR. CROSS. Well, I don't think we're under any great illusions about the extent to which intervention can or cannot make fundamental changes. Certainly, our effort has been to try to deal with instability rather than to add to it.

CHAIRMAN GREENSPAN. If there are no further questions, I'll entertain a motion to ratify the transactions since the May meeting.

MS. SEGER. I'll move it.

CHAIRMAN GREENSPAN. Second?

VICE CHAIRMAN CORRIGAN. Second.

CHAIRMAN GREENSPAN. Without objection. Mr. Sternlight.

MR. STERNLIGHT. Thank you, Mr. Chairman. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Questions for Mr. Sternlight?

MR. BOEHNE. We went through some trouble several years ago to wean the markets from the notion that an eighth of a [percentage] point variation in the funds rate made a significant difference. Along came October and we essentially went to a funds rate target and an eighth of a point did make a difference. Through changes in language in the directive we've tried to move away from that, yet it seems to me that the last couple of weeks have indicated that an eighth of a point does make a lot of difference in our own thinking and the thinking of the market.

My comment is not directed at the substance of policy; I think the snugging that was done was appropriate for policy reasons. But it does seem to me that we ought to be working against the notion that an eighth of a point makes a lot of difference, because I think that if we have to make adjustments in policy--when the Treasury balances don't work out right or for a whole number of other reasons-that could cause us to box ourselves in. It seems to me that over the longer term, we ought to get to the point where the markets can see some movement up and down in the funds rate and not overly emphasize the substance of that in terms of policy. I don't think our actions in the last couple of weeks helped us in moving in that direction. I guess my question, if there is a question, is did it make any difference that we took out the sentence in the directive last time, and watered it down the time before, that we were going to allow a little more movement in the funds rate in the implementation of policy?

MR. STERNLIGHT. I think it did make a difference, President Boehne. I think that's how it was able to unfold that in undertaking a change in the borrowing which we thought would be associated with a 7-1/4 percent funds rate, it got us to something more like 7-3/8 percent, or even 7-1/2 percent with the addition of some seasonal pressures here. I've heard a number of times the commentary back from the market that they perceive us as operating now very much more on reserve numbers and not as much on the funds rate. So, I wouldn't share your evaluation of recent weeks.

MR. JOHNSON. It's 8 percent today.

MR. BOEHNE. It's a Wednesday, too.

MR. BLACK. Your borrowed reserve figure is below target, too.

CHAIRMAN GREENSPAN. There is another issue here. There is a general concept in the market--which I think we want to reinforce and have been trying to reinforce--that we are gradually moving. I think the one thing we don't want to communicate is ambiguity on that question. I think that's what has been crucial, in a sense, as distinct from an eighth or a quarter [percentage point on the funds rate].

MR. MORRIS. Mr. Chairman, this is a minor matter, but I find it rather curious that Lloyds, at about the time they're recognized as a primary dealer in the U.S. market, dropped out of the gilt market. I wondered what the--

MR. STERNLIGHT. Well, that gave us a little pause, too. We quizzed them quite a bit about that because we look for lasting commitment. But I think they're quite different markets. It was pretty obvious from the word go that the primary dealer group in the London gilt market was overpopulated and that firm along with several others did choose to opt out of that market. We thought they made a plausible case to us about the difference in conditions in the two markets. And they have performed satisfactorily, in our judgment, in the U.S. securities market.

MR. BLACK.

CHAIRMAN GREENSPAN. Governor Johnson.

MR. JOHNSON. You mentioned that bond yields could have been affected by some expectation that there wouldn't be long-bond authority?

MR. STERNLIGHT. Right.

MR. JOHNSON. Recently, though, I've also seen speculation that the House is going to issue long-bond authority. And to some extent, I think the bond market today can be reflecting the reverse of that.

MR. STERNLIGHT. We were hearing that Governor Johnson. The [long] bond has declined in price today on reports that maybe that proposal would be put into this technical bill on adjusting the tax measure. From my conversations with people at Treasury, my impression is that they would not be at all surprised to see the additional bond authority put into that bill, but they have rather little expectation that it will work its way through the legislative process in time for the August refunding.

MR. HOSKINS. Peter, have you heard much discussion on the street about a discount rate change?

MR. STERNLIGHT. Maybe a week or so back there seemed to be sporadic comment of that nature. I would say there is not all that much of it right now; I would say it is not a widespread expectation at this point.

MR. HOSKINS. What would you think the impact on the funds rate would be if the discount rate were to be changed?

MR. STERNLIGHT. Well, I think if we're keeping the borrowing level about the same, there would be a tendency to have virtually the whole of it pass through--

MR. HOSKINS. Oh, the whole change would--

MR. STERNLIGHT. To the funds rate.

MR. JOHNSON. I just thought about one other thing I wanted to ask, which was mentioned by Bob Black. The funds rate was generally trading slightly above even the narrow range that was suggested would be associated with a flat \$50 million [increase in the] borrowing number. And we haven't really been around that borrowing number very much. I still sense that there is a bit of a problem with the borrowing function relative to what we might expect. If we were to run at \$550 million of borrowing consistently, would we see slightly higher funds rates than what we would ascribe to \$550 million?

MR. KOHN. I think it's a little hard to say, because we had these technical factors, as Peter mentioned--the corporate tax date and now the quarter-end pressures. It's true that in the second maintenance period we had a relationship which suggested that borrowing was a little low. But in the first maintenance period it was high--that was reversed. So the more recent evidence might indicate to some extent that the borrowing was low relative to the funds rate, but there are so many other things going on. I don't think you could conclude that a further shift--now this would include in our calculations the additional shift that we saw last fall--that another \$100 million downward shift in the borrowing function [has occurred]. We've just carried that through; that certainly has [not] gone away.

MR. JOHNSON. Okay. Actually I guess that's still with us in your--

MR. KOHN. Absolutely; yes.

MR. JOHNSON. Okay.

MR. MELZER. I noticed in one of the recent daily wires that staff were somewhat surprised about the increase in demand deposits and the reserve data. I guess it's in this current period. Any feeling as to what that's associated with and what's driving the--

MR. STERNLIGHT. We did get that big upward revision in the path a day or two ago.

MR. KOHN. In the demand deposits, it could be a problem with this tax date because the surge in demand deposits is in this week of June 20th, which includes the tax date for both the individual non-withheld and the corporate taxes. Whether our seasonals capture that right [is a question]. The preliminary data that came in yesterday and today suggest a runoff, though not a runoff of the entire amount. But the \$3.7 billion increase in the June 20 week offsets a decline of \$3.5 billion in the previous week. So demand deposits generally have been running a little stronger than we expected but are highly

volatile. A lot of the volatility, by the way, is at the very largest banks, so it may be associated with things like the tax dates.

MS. SEGER. Picking up on one of Manley's questions--if we hadn't done this recent +\$50 million on the borrowing target, where would you think the fed funds rate might be today? Would it still be hitting 8 percent?

MR. STERNLIGHT. I think to the extent that where it is now is largely a function of these quarter-end pressures, I would think it would be very close to that anyway--shade an eighth off maybe--

MS. SEGER. But I thought we took that move because we were worried that in the next few days the fed funds rate would decline below 7 - 1/2 percent if we didn't do it. I guess that's what confuses me.

 $$\operatorname{MR}.$$  STERNLIGHT. I think there was that concern that as a longer--

MS. SEGER. Did we not expect these special factors or--

MR. STERNLIGHT. I think as a longer-term matter our judgment then was that staying with the \$500 million could tend to push the funds rate back down. Then the question was whether that was really appropriate in light of the kind of directive that had come out of the May meeting. But I think it kind of got overwhelmed by these seasonal pressures as the month went on.

MS. SEGER. Those seasonal influences were greater than we had originally expected them to be?

MR. STERNLIGHT. They seemed so to me, yes.

MS. SEGER. Okay.

MR. KOHN. I do think the funds rate could have come under some downward pressure at the end of last week. I remember the phone calls we had Wednesday, Thursday, Friday, and then Monday when funds were trading between 7-3/8 and 7-1/2 percent. I think if we hadn't made that change things could have tended more toward [unintelligible] and then they would have firmed up this week. So, with the quarter end, I do think there was a possibility--toward the end of last week, maybe early this week--of having a different situation in the interim.

MS. SEGER. Thank you.

CHAIRMAN GREENSPAN. Any other questions for Mr. Sternlight? If not, can I have a motion to approve the transactions since May?

MR. BLACK. So moved.

MR. JOHNSON. Second.

MS. SEGER. Second.

CHAIRMAN GREENSPAN. Without objection. We now move to the report on the economic situation with Messrs. Prell, Slifman, and Truman.

MR. PRELL. Thank you, Mr. Chairman. We shall be referring to the materials labeled "Staff Presentation to the Federal Open Market Committee." [Statements--see Appendix.]

[Secretary's note: No transcript exists for the remainder of the afternoon session, which presumably included questions to staff following this presentation.]

[Meeting recessed]

## June 30, 1988 -- Morning Session

CHAIRMAN GREENSPAN. Good morning, everybody. As you may recall we left off at the point when we were about to go around the table on comments on the economy. Anyone like to start off?

MR. FORRESTAL. Well, perhaps I could start, Mr. Chairman. Before I turn to general business conditions I thought I might give you a brief report on the drought situation in the Southeast. We heard some such reports about other parts of the country last evening. The first thing to say is that not all areas of the Sixth District are being affected. The southern portion of the District, particularly Florida, has enjoyed almost normal rainfall. And so far there has been very little direct impact from the drought, but the situation is getting increasingly serious. Winter wheat yields are 40 percent higher than a year ago because of the dry spring. The soybean crop, I think, can still be salvaged if we get some rainfall during July. As in other places, we are seeing cattle producers marketing their herds ahead of time and we also are seeing the use of hay that would ordinarily be used next winter for feed supply. The poultry producers seem to have a little more latitude, but I think they, too, will be under increasing pressure.

One other issue that's being raised by grain dealers in our area is a fear that the Administration might try to limit--or even have an outright ban on--exports if the drought severely reduces domestic food supplies. I don't know whether there's really any basis for that fear on their part, but they are expressing it to us. And since they've only just begun to get a foothold in foreign markets they are, of course, concerned about their ability to meet export demand and to maintain their credibility as a predictable supplier. The drought is having a very bad impact in Atlanta and places north where the rainfall is anywhere between 50 and 75 percent below normal levels--not because there's so much agriculture up there, but because the streams and lakes feed some of the water supplies in downstate areas.

I think the other important thing to mention--and it doesn't get a lot of play in the press--but in addition to the farmers and agriculture generally, a lot of businesses are being affected because of a short supply of water. This is a very serious situation not just because we are having a drought in 1988, but because in the Southeast this is probably the 5th or the 6th year out of the last 7 or 8 that we have had below average rainfall. So, it is a serious situation and we'll undoubtedly have adverse effects if it doesn't clear up.

Looking at the region generally, we are seeing a slowdown in economic activity across the region, and generally that has been going on since the beginning of the year. Most of the activity that is positive is in the manufacturing area. The service area seems to be slowing down a good deal. We have lower retail sales; housing is not as buoyant as it has been. We're also seeing the adverse effect of a 40 percent reduction at the Lockheed plant in Atlanta which is, of

<sup>1.</sup> Secretary's note: Mr. Forrestal and other Federal Reserve Bank presidents commented on economic developments in their regions at a dinner at the British Embassy.

course, having a rippling effect through the economy. And just yesterday it was announced, as you may have heard on the news, that TVA is laying off a number of people--25 percent, I think, was the number.

Looking at the national economy, our forecast is somewhat stronger for both 1988 and 1989 than the Board staff's. We also see some slower growth in the second part of this year, but our deceleration is not as marked as the one shown in the Greenbook. Our outlook shows more strength in personal consumption expenditures than the staff's, especially in 1989. I think the difference is that the stronger expansion we see in 1989 is due to a smaller rise in interest rates than was assumed by the Board's staff. Because of that forecast we don't see much of an increase in the unemployment rate, although looking at the CPI--I will stay away from the deflator, Mr. Chairmanwe would see stronger inflation than the Board's staff.

While I'm happy that we're going to continue to have growth, on the other hand, since we are basically at full employment, I suppose I am concerned that we're growing at a rate that's beyond the economy's potential. That suggests to me that if inflation does worsen over the forecast horizon, rising prices, and perhaps wage pressures, will become embedded in expectations. So, my general feeling is that we should not risk a possible overshoot in growth.

#### CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN CORRIGAN. Mr. Chairman, in terms of the kind of anecdotal and impressionistic points of view that reach us, I would say they are essentially unchanged in that the main thrust of what we hear is still decidedly upbeat and [unintelligible] in terms of orders, especially in the manufacturing sector. We took an informal survey just in the past 2 weeks of about 8 or 10 very major companies on a particular point of capital goods imports and substitution of domestic sources for capital goods imports. And while the results of that survey were not decisive, they certainly were suggestive of the fact that there is now some evidence that even in the capital goods sector there is some substitution going on in terms of domestic versus foreign sources, although that's mainly in components. There clearly are important instances of, say, heavy machinery, in which foreign sources are for all practical purposes the only source. Nevertheless, at the margin, there are some signs of a better [unintelligible], especially in components, in the capital goods sector. The two other things that are a bit different impressionistically -- and this is a bit surprising--are that some of the commentary coming out of upstate New York, even the Buffalo area, is more upbeat than it has been, and that there's a bit more commentary here and there about labor market tightness and scattered signs of pressures on wages.

But insofar as the forecasts themselves are concerned, I think that one thing is pretty clear--they have to be approached with some humility. If you go back 6 months ago, for example, and look at what has happened, compared with what was being talked about, then that humility is well earned in the sense that the performance over the first half of the year--regardless of exactly where the second quarter comes out--clearly is going to have been a great deal stronger than was widely expected at the turn of the year. I still remember your own comment at the time, Mr. Chairman, when you said [of the

forecast] that it might be an interesting thought but something was going to be wrong with it. What was wrong with it, of course, was that the economy was stronger rather than weaker. So, I think we have to take any forecast as kind of a broad-brush profile of what might emerge rather than with a great deal of precision.

Again, the question is: Where are the risks and what are the consequences of the risks in those forecasts? As I look at it in that light, I think the risks are decidedly asymmetric on the side of an upward drift, or worse, in the inflation rate over the next 6 quarters, given current policy. Without making a big deal out of this, if you look, for example, at the New York staff's forecast, unlike the Board staff's forecast, it essentially assumes current interest rates over the period as a whole. Our staff forecast shows a real growth rate over the next 6 quarters in a range of 2-1/2 to 2-3/4 percent. But--and this is a very big "but"--that result emerges in a context in which the New York staff's forecast has a smaller gain in net exports and has inventories declining in every quarter of the forecast period.

## CHAIRMAN GREENSPAN. In inventory investment?

VICE CHAIRMAN CORRIGAN. Yes. Hence, the implied growth in final domestic demand in our forecast is, in fact, a good deal stronger than the Board staff's forecast. Not surprisingly in that setting, the inflation numbers that fall out of our forecast are significantly different in that we end up with a fixed-weight deflator in the 5 percent plus range and a CPI in the 5-1/2 to 5-3/4 percent range. Again, I take those numbers with a grain of salt, but what I do not take with a grain of salt is that if the inflation rate, however measured, were to get in the area of 5 percent or more, just getting it back to 4 percent--much less price stability, whatever that means--is going to involve enormous costs to the economy. So, I think that is where the greatest risk lies.

I ask myself the question: Well, how do those risks translate in terms of where we are now? And, particularly, what weight should be given to the changes that have already been made in policy insofar as that broad sweep of an outlook is concerned? I certainly agree with the thrust of the staff's Greenbook and Bluebook commentary to the effect that domestic demand growth is going to have to be further curbed over this period. I myself am not sure how much weight to give to the rise in interest rates that we've seen over the last couple of months, because in fact, that rise is rather modest, I think. Indeed, if you look at real interest rates in Ted's chart 8 in the book yesterday--or in any other formulation of real short-term or long-term interest rates--I think you can make a case that not a whole lot has changed. Certainly, the level of real interest rates now is not wildly different than it has been for the last 3 years. So there is a question in my mind as to how much difference the current policy posture makes versus where we were, say, 8 or 10 weeks ago.

The bottom line as I see it, is that if--for policy reasons, or faith, or whatever--it turns out that growth is somewhat weaker for a quarter or two or three, I certainly don't view that as the end of the world. In fact, I think it's not altogether bad. It works in the direction of prolonging the expansion in general and it actually helps the external adjustment process. On the other hand, if inflation

crosses whatever threshold one chooses to worry about--I pick the 5 percent threshold--I think the costs of that are going to be very, very great indeed. And that's how I essentially come to the conclusion that the risks, at least in my judgment, are decidedly asymmetric.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Thank you, Mr. Chairman. The Twelfth District economy continues to grow, but the pace of growth appears to be slowing. The region does continue to benefit from increased foreign trade; and high-tech industries are facing strong demand, particularly in the aircraft area. Also, wage pressure is building in such industries as forest products, aircraft, and food processing. We believe that capacity constraints are becoming a concern in the fastest growing areas of the District, particularly the Pacific Northwest. Business investment is high in plant and equipment, but firms are not expanding what we would consider to be aggressively, and we are noticing that delivery times are lengthening.

With regard to the drought, it is not having much of an impact on the District's agricultural industry, although Idaho and Utah and also eastern Washington are threatened by drought conditions. Subpar yields are expected in much of the District because of unseasonable weather, which ironically is associated with unseasonable rains. But current high prices will make the farm income of the District actually rise.

Turning to the national economy, if short-term interest rates move up about 100 basis points over the next year or so, we expect growth to average about 2 to 2-1/2 percent--perhaps toward the lower end of that range--over the forecast period. And we also would expect that the slowing in growth would produce only a slight increase in the unemployment rate. Without factoring in any implications of the drought for inflation, I believe that the labor market conditions, and also a falling dollar, will cause an acceleration of inflation to about 4-1/2 percent next year, as measured by the fixed-weight deflator. And I would also associate myself with the comments of Vice Chairman Corrigan as far as the risks are concerned.

CHAIRMAN GREENSPAN. Bob, did I hear you correctly? You said that the Twelfth District is slowing?

MR. PARRY. The rate of growth is slowing somewhat.

CHAIRMAN GREENSPAN. Where is it slowing?

MR. PARRY. Well, I'd say it's fairly general. We've seen some slowing in retail spending. We've checked with retailers and there seems to be less spending across the board in the retail area, although concentrated I'd say in apparel and, to some extent, automobiles. Even lumber, I think, is not growing as rapidly because they've hit a constraint. If you look at some of these [developments], it's basically consistent with the slowing of the economy from what we can see.

CHAIRMAN GREENSPAN. It's characterized by both supply and demand constraints, am I right?

 $$\operatorname{MR}.$$  PARRY. Yes, but taking the retailer, it's clearly demand.

CHAIRMAN GREENSPAN. Yes. President Keehn.

MR. KEEHN. Mr. Chairman, with regard to the District economy--except for agriculture, and I'll comment a little later on that--I think, broadly, conditions in our area are pretty much unchanged from previous meetings. I've commented before on the steel industry and industrial equipment. Those types of activities are continuing to be very, very strong. And I think the improved export market has really had a very positive effect on the manufacturing part of our District. There are some industries that have been selling almost exclusively on the domestic side that are now beginning to export products, and this is a very positive thing. And I think the value of the dollar will continue to provide good export opportunities and also improve production on the domestic side. In machine tools, for example, where imports as recently as a couple of years ago had about a 60 percent participation in the machine tool business domestically, that number is now down to about 37 percent. there's been a very significant positive shift in the machine tool industry. And from all of my contacts on the manufacturing side, the tone out there is very positive; everybody has a good expectation that the expansion will continue.

On the drought picture, I can add little to what was said last night or to what Bob Forrestal said. I think we are continuing in a period here where we have a bit of a window. I keep hearing about the 10-day window; it keeps moving out. But I think we are at a point where if we do get some rain the [unintelligible] can be pulled out of the bag here. If we get rain--and there was some rain earlier this week--I think the corn crop probably will be down by some 10 to 25 percent. For soybeans, there's still enough time that if we get some rain that could be a normal crop. But having said that, if we don't get as much rain as we'd like, even under the worst of circumstances, the component of commodity prices in the final retail value of food is such that we would not expect that this drought will have that dramatic an effect on food prices. I think the number that Mike suggested yesterday is very much within the range that we would forecast.

I've been worried about the effects of this on the banks as much as anything. We did a quick survey of some of the ag banks earlier this week and I, frankly, was very reassured. I would have expected that some of these problem loans would begin to reemerge. The banks that we talked to said "no," that's not the case--that the weak borrowers were really shaken out over the past few years. The strong borrowers are now those who remain and they have the strength to sustain a bad year such as this. That's not the case, as I understand it, with the nonbank lenders--the FMA, FHA, and the FMHA. There are apparently [unintelligible] some problems in loans to developers. The banks at this point feel adequately collateralized; they're not taking that much collateral. They seem to have plenty of reserves built up for this and they think they can handle the problem without an onslaught of additional problems.

I also checked with the exchanges. I was concerned that we've gone through a period here where the margin calls were pretty

heavy. And the exchanges say that there have been no particular strains. The volume of margin calls has been high, but so far they have been met. The banks that deal with us are not experiencing any shutoff in terms of the credit that they're granting. So the exchanges, I gather, are coming through.

Finally, with regard to inflation, our forecast of the deflator is a little lower than the staff forecast for both '88 and '89, but I think we may revise that somewhat. Nonetheless, it's clearly the case that we are on an accelerating trend line here and I think all the signs do point toward an increase on the inflation side. Capacity utilization for many of the industries in our District continues to be at very high levels and I am sensing some upward movement with regard to [unintelligible] prices. Markets have been pretty sticky in the past, but I think there's a little more give in this.

A little more positively, I do think there is something of a changed attitude with regard to some prices over the last two or three weeks, in nonferrous metals and chemicals particularly. They have had a very significant roll up. I have talked to a number of people who have the expectation that such prices will stay about level for a while--not go down, but not continue the kind of increases that we've experienced over the last six months or a year. On the wage side, I think there is a hardening attitude developing in the wage contracts. Admittedly, the results are coming in very favorably--the numbers look positive--but I just sense that in the bargaining process labor has a harder attitude than they have had in the past. So far the unit labor costs have remained in check because the [unintelligible] changes have been good; productivity increases have been pretty good. But I think, intuitively, the risks on the inflation side just have to be on the upside. And certainly, the agricultural picture only adds a little pressure--yet to be determined how much--but a little pressure on the upside. So, I'd agree with Vice Chairman Corrigan that the risks here on inflation are very much on the upside, not on the downside.

CHAIRMAN GREENSPAN. I'd just like to interrupt for a minute, because a very crucial issue seems to be emerging here, and I was wondering whether we could just retrace for a second. Everyone is commenting explicitly that while the wage data don't show this, there's a subliminal sense of changing wage demand pressures. Could we go back-does anyone want to address this specific issue? Because I think it's a very important question as to whether, in fact, that Wall Street Journal article, which I thought was a little overdone, is anywhere near correct. What can you give me more than just your feeling? What's the evidence that you're--

MR. KEEHN. That's the problem; there is no evidence.

CHAIRMAN GREENSPAN. But you're obviously speaking to people who are on the firing line. It's not just a guess; something is happening because you do hear--

MR. KEEHN. I am talking to people--chief executive officers of companies--who are continually going through the wage bargaining process. Job security has been the number one issue and continues to be very high priority. And labor has been very reluctant to go on strike. I don't think there's necessarily going to be a change in

that. But they are just getting a harder attitude, because they are concerned that the increases they're getting are not keeping pace; and they feel they have a stronger position than they have had. It hasn't shown up in the numbers and I think that's the mystery in all this. That we've gone through the process--

CHAIRMAN GREENSPAN. Let's recycle those who have already talked on this issue and then I hope that those of you subsequently who have some insight on this will address this question. Bob?

MR. PARRY. Two specific comments on that issue. First of all, in the state of California, the minimum wage goes up tomorrow by a little more than a dollar an hour to \$4.65. I think there's no question that that's going to have an impact. I think most people are expecting that to have some impact. I'm not saying a lot of people are working at that low minimum wage, but it just has a ripple effect through everything. Another example I'd give is that there is a big strike in the lumber industry at the present time. It actually has been expanding in terms of the number of workers involved and it does involve wages. What seems to be on the table is a proposal which I think is around 4 to 5 percent over a four-year period, which would bring them up to where they were a couple of years ago--but that's sort of irrelevant from the viewpoint of what it does to inflation at the present time.

CHAIRMAN GREENSPAN. Jerry?

VICE CHAIRMAN CORRIGAN. Well, I guess I'd make two points. First, I think that if you take all wage and related data as a whole, you can make a case that there may be a bit of an upward tilt already evident there.

CHAIRMAN GREENSPAN. I think there is. It's a lot less than one would get from any of the analytical equations or from history. The question is--as I hear this conversation emerging--is it more than that?

VICE CHAIRMAN CORRIGAN. As I said, I was going to make two comments. One is that I do think you could make a case that there is a bit of an upward tilt already there in the wage data taken as a whole. In terms of the anecdotal stuff, again it's quite common for businessmen, small and large, these days to talk about the difficulties they're having in terms of attracting and retaining good quality workers at all levels. You hear comments, for example, that they have had to selectively bid up starting salaries. And at least in New York State, both upstate and downstate, for example, we have had in the recent past a couple of very, very large wage settlements in the public sector. This is the type of thing, school teachers and the like, which in a macroeconomic sense is literally a pimple. But they are very, very high profile and high visibility types of things. So again, I think Si is right when he says that it's something that is in the air; but I think it's here, at least a little, in the numbers, too.

CHAIRMAN GREENSPAN. Bob, do you have something?

MR. FORRESTAL. Well, Mr. Chairman, in the Sixth District I can't really point to any hard evidence. I think you're quite right

in being concerned about that because it just isn't showing up in the data. When I talk to my directors at the head office and at the branches—and that covers a lot of territory—they say they're not experiencing any wage pressures in their own industry, but they have this subliminal fear, as you put it, that there is going to creep into expectations—

CHAIRMAN GREENSPAN. Something is causing that and I think it's important to figure out what it is.

MR. FORRESTAL. Yes. And it's very hard to put your finger on it. I was with a group of business people in Nashville the other day and I specifically asked this question about wage pressures either in their own business or in others that they might know about. And the answer I got was "no, but with prices increasing, and with the sense that inflation is on an upward path, that ultimately is going to be translated into higher wages." So I think it's a fear that perhaps is ahead of the data.

CHAIRMAN GREENSPAN. President Boykin.

MR. BOYKIN. Mr. Chairman, in the Eleventh District, not a great deal has changed. I think I reported that we had some improvement in the Eleventh District economic picture over the last half of last year. It seems to have flattened out over the last several months—at least that's what our statistics are saying. It's a little confusing, though, because in talking with business people around the District I'm probably hearing more optimism, other than in banking and real estate, than I've heard in the last couple of years. I think expectations are pretty [unintelligible] in the Houston area, and there the expectations, as well as the statistics, are becoming more consistent than throughout the rest of the District.

Looking at the District and trying to project ahead, we think possibly we are poised to resume some upward movement. Our portions of New Mexico and Louisiana are both showing some growth, but I think for the states as a whole, most of that growth really is in Roger Guffey's and Bob Forrestal's parts of those states. Manufacturing has leveled off and that's where we were getting most of our improvement last year and fairly early this year. That seems to have peaked a bit. Energy has been stable. We've seen considerable job loss in retail trade and financial services; and, of course, construction remains our weakest sector.

We're having a little negative impact from the drought, but it's not anything compared to what's happening in other parts of the country. We have some dry spots, although judging from reports earlier this week the dry spots in our District have all had pretty good rains; and those that have had pretty good rains were missing them, so it's kind of evening out. The drought, though, is pretty much of a regular feature down our way and our people know how to handle it and prepare for it and expect it--so maybe we're not quite as exposed.

I did meet with a group of investment bankers and nonbank lenders last week and they confirmed what we've been hearing otherwise, and what the statistics have been shoving-that there's really little or no new lending to the small and medium sized

businesses. And we think that this capital shortage is likely to be an impediment to the continuation of even the weak recovery. So, that is a matter of concern.

On the wages, I really have no insight into that, Mr. Chairman. In fact, it's not something that I'm hearing discussed too much down our way. Job security and hopefully trying to get a little more job growth are what we're hearing about, as opposed to conversation about pressures or moving wages. On the national picture, we're pretty close to where the Board staff is on that.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. I don't think the local District numbers provide a lot of insight; they're very much in line with what's going on nationally--somewhat stronger manufacturing growth, somewhat weaker residential and nonresidential construction. But, particularly in the nonresidential sector, we were late to adjust; it was quite strong while national figures were turning down.

On the wage side, the only thing I have to add pretty much mirrors what Bob Forrestal said. I got this from

a major consumer durables manufacturing firm, and it really is that people see CPI numbers that begin to approach 5 percent. His anticipation is that the pressure won't be very strong from labor; he's not seeing it yet. And in my judgment, that would be the reason for this, here on the wage side.

Nationally, our forecast is based on our St. Louis model. And what we've done is pick monetary growth--I don't know whether you call it appropriate monetary policy or likely monetary policy--that's consistent with what we've seen in '87 and in the first half of '88, which is Ml growth somewhere in the 4 to 6 percent area. What that throws off in terms of numbers is something that's very close to the Board staff's forecast for the second half of this year. But for next year we're considerably higher--about a percentage point--in terms of nominal growth and somewhat higher in real growth; we're a good 7/10ths of a point higher in terms of inflation, which is troubling, I think, particularly because of the kinds of things we're seeing now in terms of the behavior of the dollar and financial markets and so forth. There's a risk that in the short run we could get lulled to sleep. I think we need to be very mindful of that problem.

But having said that, I guess I also have to say that in comparing this period, say, to the late '70s and early '80s, we're dealing with monetary growth rates that are roughly half of what we were dealing with at that time. So, I'm not sure in a longer-term context that we have to do as much to accomplish the longer-run inflationary goals. I guess I'm saying, in part, that I think what's showing through in our forecast are the effects of some earlier monetary policy actions going back perhaps to '86--some temporary effects and so forth. And I think that the process of dealing with those building inflationary pressures in the longer-term sense has to be a gradual one. In other words, it doesn't require the same kind of response necessarily that it would have in the late '70s and early '80s. And I suppose we've seen that in terms of our actions now, because very timely, relatively modest, actions have had a considerable impact. I'm not saying that it isn't going to take more

of that to deal with this problem we perceive of this temporary inflation getting built into wages. But that's what our forecast shows.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Well, let me talk a little about the District first. I commented on the drought last night and I really don't have much to add to that situation. Exclusive of the drought, although it's hard to do this in any rigorous sense, I think that District economic growth is actually accelerating. We have continued improvement in the mining economy, continued strength in pulp paper, wood products, and so forth. And it is turning out to be a good to a very good year for tourism, even though it has been too hot to catch any fish. In Minnesota, which in terms of economic activity is the heart of the District, if it weren't for the drought, I think you'd almost have to describe the situation as a boom. Unemployment in Minnesota now is down to just a touch over 3 percent. All the metropolitan areas, where the economy is reasonably diversified, are looking at very strong economies. So, that's a description of the situation.

As far as wage pressures go, what we've picked up anecdotally from some of our directors and advisory council people is this: one of our manufacturers, whose entry level wage is \$6 to \$7 an hour, reported that he just can't keep people at that wage at all. like running an employment agency. They'll hire somebody in the morning; [the new employees] work a couple of hours and if they don't like it, they just walk out the door at the first break and apparently go across the street or go do something else. It's a very tight labor market in that sense. We do have reports, certainly, that minimum wage jobs are going vacant in the District. Our own experience has been that it's certainly taking longer, considerably longer, to fill entry level clerical jobs than it did as recently as a year ago. Another one of our manufacturers indicated that now he's just starting to have problems with the union. Now, I don't think it has translated into higher wages or anything like that yet, but my impression is that the union is just starting to get more aggressive. At least that's what he has reported.

As far as the national economic situation is concerned, I find myself largely in agreement with the Greenbook outlook. And the Greenbook, at least in my view, does point to the right issues that we have to confront here. I think it might well be difficult without some further policy actions to keep the rate of increase in the deflator at or below 4 percent over some sustained period of time. Whether we'd do that in any quarter-to-quarter PERIOD, I wouldn't try to forecast. But I have a hunch that that's where the risks lie. And I think international considerations are going to turn out to be important, perhaps increasingly important, in this situation because I am struck by the fact that it's not just our economy that has grown more rapidly over the last several quarters, but a number of important foreign economies. Other things equal, I think that does add to demand pressures.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. On the District and the question you raised about wages, the concern about higher wage costs is certainly there in an anecdotal sense. I've tried to pin it down as best I can. I think to a large extent it's a state of mind, but when I ask for specifics, these are the kinds of things that I'm told: It appears that the greatest pressure is at the starting salaries at lower levels. For example, someone who runs a very large supermarket chain in our District told me that he had to raise his starting salaries about 25 percent--now that turns out to be about \$1 or \$1.25 an hour. But then, when you work that up to the people who have 6 months to a year and a year and a half of experience, you get a kind of stair-step increase. Another place where you hear of this is at services institutions. For example, at financial institutions, whereas a year or so ago they were talking about wage budgets with increases in the 5 to 6 percent range, we hear more right at 6 percent, and now I'm hearing talk of 6-1/2 percent. Another thing we hear is that this 5 percent number on the CPI seems to be one of special concern. While there aren't as many COLA clauses in union contracts now as there were several years ago, where they are in contracts, 5 percent on the CPI seems to be a trigger point. Since we've been getting pretty close to that in recent months, I think there's concern that the COLA may be triggered. Now, that will have an impact. Generally, most of the concern about [wages is coming from the] non-union side. I think this is not surprising in our District because, if there's one unifying theme among almost everybody you talk to throughout the District, it's very, very tight labor markets. Otherwise in the District, we have reports of very strong manufacturing and some moderation in retail sales -- the same kind of things that you find in some other Districts.

At the national level, Jerry Corrigan said a lot of what I wanted to say in terms of [unintelligible]. [On the inflation side we] see this accelerating trend. For example, the consumer price index the last 3 months was 4.9 percent versus 3.9 percent the previous year. The producer price index in the last 3 months was 6.2 percent, and in the previous year, 2.2 percent. If you look at the intermediate [level], crude goods in the producer price index rose at a rate of 8-1/2 percent in the last 3 months and 5 percent over the previous 12 months. And industrial raw materials are really at about their highest level during the expansion since the '79-'80 peak. So, I think that it's not just that we're fearful of an economy running up against supply constraints and inflation in the future. I think that we are seeing some very tangible signs that we're on this accelerating trend. And it's much less costly to try to keep inflation from accelerating than it is to unwind it later on.

In the chart show yesterday, as I heard it, essentially the basic message was that what we have to do is slow real growth from something like 3 percent plus down to 2 percent or a little more. And I agree with that in general. The idea that that can be done with a 1 percent rise in interest rates over the next year--I hope that's right. But I suspect there would [not] be a very large kick from that small of an increase in interest rates.

CHAIRMAN GREENSPAN. President Morris.

MR. MORRIS. Well, Mr. Chairman, I think the data for the last two months are pretty close to ideal. We've had a slowdown in consumer spending and an increase in exports, and we've had moderation

in the growth of orders since December. I was quite alarmed at the rate of growth of new orders for durable goods and capital goods last year. That was clearly something that was not sustainable. And so the inflection toward slower growth that we've seen since December is welcomed.

We're seeing the first signs of the impact of a slowdown in military spending. General Electric laid off 800 people from a defense electric factory. It's the first layoff in the defense industry that I've seen. So I think that the military budget stimulus to the economy has peaked and will probably be a somewhat negative influence in the next few years. And that will perhaps give us a little more breathing room in the industrial sector--breathing room we need very much. I think we're at a point now where the economy really can't sustain a growth rate of more than 2 percent without generating inflationary pressures. And I think we've got to lean against any period of growth in excess of that. I sense that there has been a deceleration in recent months and I hope that continues.

I've been going around New England on a private campaign to avoid a future commercial building glut in our District. We have the kind of euphoria in commercial building now that they had in Texas in earlier years. And I think there's not a proper recognition that the New England economy from this point really is going to be a very slowly growing economy. That's the speech that Mr. [unintelligible] referred to yesterday. We're at a 2.9 percent unemployment rate. In addition to that, we've got a slower natural growth rate of the labor force than the rest of the country because our birth rate has been relatively low. That's compounded by the fact that our labor force participation rate is substantially higher than the national rate. We're running about 2 percentage points higher in the participation rate for men and about 3-1/2 percentage points higher for women. So, the only way we can grow as fast as the national economy is by having a very large in-migration of population.

So the arithmetic of the New England economy is very clear. We're going to be a slow-growing--prosperous, but slow-growing--economy for the next decade. But I see the commercial developers making plans on the assumption that we're going to grow as fast as we have in the past 15 years. That's why I'm out trying to generate a little caution among the lenders, because I think the history of Dallas and every other place is that as long as the lenders will provide the developers money, they're going to build. I can remember very well the time a couple of years ago when Bob Boykin expressed his dismay at the fact that a new office building was just getting started in Dallas despite the drop in the price of oil and despite the fact that the vacancy rate was over 20 percent. So we're trying to do what we can to have a building boom that doesn't end in a glut. I'm not sure we'll be successful, but we're trying.

In the regional area, we have an expectation of a rising rate of wage increases for which we can't provide any documentation either. Steve McNees generated a wage forecasting model a number of years ago and it performed very well until the last few years where the model says that wages should have been going up much faster than they have been.

CHAIRMAN GREENSPAN. That's true with every model.

MR. MORRIS. Yes. And I think that is really the basis for our concern, because you really can't look at the data and say we're at an inflection point. I think that may be the basis for concern generally. Wages should have been growing more rapidly for a 6th year of expansion than they have, and ergo, they will be growing a lot faster. I think quite clearly our job is to keep a sharp eye out for the growth rate in the economy and to lean against it if it gets [too high]. I don't know whether the 2 percent guideline is the proper one; I'm inclined to think that, given the arithmetic on productivity and labor force growth, we can't come out with a number a lot higher than that. I really question, unless we get a much better productivity performance than we've had, whether the 2-1/2 percent the staff is using is not too high--whether two percent may be more realistic. But I think we're at a point now where we've got to lean against any rate of growth in excess of 2 percent.

#### CHAIRMAN GREENSPAN. Governor Johnson.

MR. JOHNSON. Well, let me just say that I see things that are similar to many of the presidents. First, on this growth issue, clearly the pace of growth we've had has shown itself to be too strong to be sustainable without an acceleration in inflation. But what kind of growth is necessary to keep inflation from accelerating—or even to allow it to decelerate from current levels—I have no idea. I would hate to get into trying to fix on any number to shoot for to set monetary policy. I think what we ought to do is take action until we see the response we're looking for in terms of financial market expectations and the environment for decelerating inflation, regardless of what the growth rate consequences happen to be.

But, like everyone else, I think the economy has certainly looked strong, with manufacturing at a high level and exports near a boom. But I acknowledge exactly what Frank was saying: that this year so far we've seen a leveling off and a beginning of a slowing in manufacturing; and orders have started to trend down. Payroll employment growth rates have slowed. We still have significant growth in employment, but it has slowed. The housing market is certainly at lower levels. Domestic demand is continuing to grow at the slow pace of '87. So, I think we're getting the kind of domestic demand growth performance that we've been seeking with our policy, and that's very encouraging.

The markets themselves are starting to acknowledge the effectiveness of our policy, in my opinion. We have finally, I think, seen the financial markets start to react to the firmness of our policies. And in my opinion, we've seen a fundamental shift in the exchange rate, and it has been acknowledged in the bond markets to some degree. That could all turn around if we get a whole set or series of bad trade numbers and if things don't look like they're continuing to progress some on the external side. Nevertheless, I think that we've gotten the kind of response in the financial markets that we've been seeking with our policy.

One of the things that concerns me a little and makes me want to be cautious at this stage is the fact that because we're getting that response, and the dollar has strengthened, and the yield curve has flattened out--all of which I think are desirable characteristics and exactly what we want to see from our policy--this response is

nevertheless going to put pressure on foreign central banks to tighten up their own monetary policies. The Bundesbank raised the discount rate this morning. I think that's probably desirable given the fact, as Gary pointed out, that some of those economies have been growing at a faster pace. Nevertheless, it's going to have the effect of damping domestic demand abroad. So, I think the stronger dollar in the United States and the response by foreign central banks to tighten, to shield themselves from the potential transmission of inflationary pressures there, are going to damp foreign domestic demand.

The combination of our slow domestic demand and a more damped foreign domestic demand, I think, is what we want; but it's in the There's going to be a lag there, and I think that we have to be very careful not to go the point where we're going to combine our fairly slow domestic demand growth with a decelerating foreign domestic demand and leave ourselves without a trade adjustment. think there is some risk of that, although we can always get the trade adjustment by dramatically weaker U.S. domestic demand for imports. But I think that's not what we're looking for. So, I think the lagged effect of our policy action is in the works and what we're seeing on the inflation side now is to some extent -- as has already been mentioned -- the lagged effect of past policy actions. And what we've done in the recent past now is going to show through with a lag. The financial markets, I think, are showing confidence in the fact that we have been effective in our policies; otherwise, I can't imagine why the long bond markets and the dollar would be behaving as well as they have.

It's true that commodity prices have been accelerating sharply. I attribute a lot of that to the drought conditions and they are less forward looking than the others; commodity futures, I think, only go out a couple of years. And they can turn on a dime. We've had two sharp declines—to the limit—on the CRB index the last couple of days just because of a little rain in the Midwest. So I think we have to be fairly careful at this point because there are lags and we have to take them into account.

On the wage side, once again, I don't see any acceleration in wages from the [published] numbers. There are some slight curves in the numbers, but those don't look any wavier than they have since 1983. But I do sense some more nervousness. We're 6 years down the road in the expansion and there's no doubt that industry is more nervous about the progress on the wage front from this point on. But the Conference of Chairmen met here recently, and without exception, they all said that they saw no pressure on wages, just like you have all said. Yet there was a sense that, if workers felt they were going to fall behind relative to price pressures and their real wages were to deteriorate for another year, you might see a much more militant labor situation.

MR. JOHNSON.

I think pointed out in that conference meeting that he had been expecting wage pressures in '87. They thought that they were going to arise because of the upward pressure on oil prices, which caused the CPI to grow faster than nominal wages that year.

### CHAIRMAN GREENSPAN. He's the head of the

MR. JOHNSON. He said he was surprised that the pressure didn't materialize. And I think that's what is going wrong with the models, for some reason. I don't know how long you can get by with that, but the fact is, the wage pressures are not yet there. But I think another year of accelerating prices relative to nominal wages might be a problem.

CHAIRMAN GREENSPAN. I think the wage models don't have in them the ratio of imports to domestic demand, if you're going to do it that way. Because that's clearly what's doing that.

MR. KELLEY. Manley, excuse me for interrupting you, but went further than that. He said there will be no inflation pressures generated by wage pressures. He made that flat statement.

MR. JOHNSON. Yes, I think that's right.

MR. BLACK. Well, one thing to bear in mind is that he have been taking a big share of the business down there. Yesterday, I talked to him and he closed the conversation by saying "I'm getting extremely worried about inflation."

MR. JOHNSON. He is.

MR. KELLEY. That's a fast turnaround in two weeks.

MR. BLACK. He doesn't expect his own or his associates' [wages to go up], but he's worried about the inflationary pressures emanating elsewhere with no increases in salaries or wages for his own people. That's one of the problems.

MR. JOHNSON. Right, he is.

MR. BLACK.

MR. JOHNSON. No, he is very responsible; I respect his judgment. So, on the wage front, once again I say there's nothing yet, but you do get the feeling that something is out there. At the same time, I think all of the strong good feelings going on now are a cumulative effect of the positive growth we've seen in the past. And where we go from here, I think, is going to be the lagged response to what we've been doing over the last 6 months or so. And so we've got to be careful. I do think that probably the risks are still more on the upside than the downside as well. But I think that we need to be very careful from this point on that we pay attention to the lags that are taking place in the forward-looking markets where we have been effective in my opinion.

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. Turning to the District, Mr. Chairman, I think it's safe to say, in summary, that our grassroots contacts don't

really see any slowing in the expansion, in contrast to what the national figures seem to be showing. There are widespread reports of extremely high levels of capacity operation in textiles, furniture, chemicals, paper--that sort of thing; difficulty in hiring workers; upward pressure on wages--and our most concrete example is in the case of the fast food industries where they have had to push their wages up well above the minimum in a number of places; and also reports of shortages of chemicals in certain areas. For example,

and his suppliers of certain [raw materials] that he uses put him on quotas so he can't produce enough to satisfy his demand.

In the case of housing, all of you in Washington are familiar with what has happened around here. They can't keep up with demand. And pretty much the same sort of thing has happened in the Richmond, Charlotte, Greensboro, Raleigh, Chapel Hill, and Durham areas, where the economy is really booming. Home prices in Washington in the last couple of years have gone up about 1/3 and pretty much the same sort of thing is true in Richmond. That's what they seem to feel, but I think Frank is right in saying the statistics do show some slowing there.

Insofar as our particular projections are concerned, there's not a lot of difference in what we've projected and what the Board staff has done, except that we do expect more inflation next year than they have put in [their forecast]. Interestingly enough, Tom Melzer and I ended up with exactly the same amount of additional inflation for next year. The most important thing, I think, in the staff's analysis is their assumption that we need to have some tightening actions in order to bring about the results that they're projecting. An analysis we have conducted at our own Bank reaches the same sort of conclusion. My guess is that if there's going to be an error, I would come out about where Jerry Corrigan and some of the rest of you did: that the Board staff's forecast--and ours as well--might be actually forecasting less inflation than we're apt really to have.

At the rate we're going, the Greenbook shows a very smooth transition from this expansion driven by domestic demand toward one driven by foreign demand. Except for a brief upswing in the third quarter, the rate of growth in gross private domestic purchases is expected to slow down significantly as the result of a weakening in consumer demand and business fixed investment. And, of course, that's a perfectly plausible scenario, and it would be a very excellent one if it works out. But, as I'm sure everyone would have to agree, it's far from a safe bet. I guess we would conclude that business fixed investment in particular, given the high levels of capacity utilization, is apt to be somewhat stronger than we're thinking. So, in short, while we think the Greenbook forecast is very reasonable and very defensible, that's probably the best that we could hope for; and our fears are that we're not going to do that well on the inflation side.

## CHAIRMAN GREENSPAN. President Hoskins.

MR. HOSKINS. Let me start with the labor issue. We don't have any specific information, at least that I've generated, on it. But in the Fourth District, particularly in Cleveland and Pittsburgh, we have very large manufacturing firms where over a period of years

I've heard a number of them say directly that "We've learned our lesson with respect to wages and inflation and we won't repeat that mistake." I think that might explain partially why you see lags the way you see them. People--labor and management--are still working in Cleveland to insure that they gain market share and retain jobs. However, I don't think that can go on forever and we're liable to see a snapback rather quickly when we get to that limit. But I don't have any information from these people that we're at that limit today. I haven't asked specifically, but the fact that they haven't brought this up in conversations, I think, is indicative that they're not overly concerned at this particular point in time.

Overall, the District continues to be very strong in capital goods and also very strong in exports. The stainless steel strip indicator, which is something that I casually follow, was up around 35 percent in terms of new orders against a 5-year average in the last 3 months. Lead times haven't lengthened, however. The price increase in the last 18 months in that particular product has been 80 percent. And exports in stainless, at least from this company, are up 65 percent. So a lot of things are working now correctly in the District.

Some aren't working out so well. As in other Districts, retail sales seem a little softer and construction is softer. I guess I'm a little uncomfortable in analyzing, or going through what seems to be kind of a Phillip's curve framework here, when we talk about resource constraints versus inflation. I think Governor Johnson put it back on the track. Our concerns, or at least mine, focus around the fact that we have had a couple of years of 4 percent inflation. We don't seem to be making much progress toward [reducing] it. And I think that's the real focus, at least in my view, for monetary policy. As we look ahead, even the Board staff's forecast, with a substantial tightening in it, produces another 4 percent next year at the very minimum. The Board staff's forecast on CPI ex energy and ex food is 5 percent. So that leaves me with the position that says I think we have to be very concerned about inflation. I don't know how much we may have to move again; I'm not sure how much we really have moved in the past 6 months. I know where interest rates are, but I don't know how much the market did to put them there versus policy moves. So, I think what it boils down to is that expectations are important for us right now. And what we signal to the markets, I think, is important. I'm not sure of the magnitudes that we ought to be signaling, but I certainly would err on the side of moving earlier rather than later. So, I see strengths across the board but not a boom; and I do continue to worry about the errors on the international side being somewhat higher in terms of real growth than we think at this point in time.

# CHAIRMAN GREENSPAN. Governor Angell.

MR. ANGELL. It seems to me that in the last 6 months we've had a rather noticeable shift, at least on the part of the staff. I felt that 6 months ago the staff were not sure about the Board's and the FOMC's resolve on inflation. And I'm very appreciative of the fact that the staff have read this resolve of the FOMC in regard to inflation and that they have given us a monetary policy projection that's somewhat consistent with that. As I look at the Greenbook numbers, I don't focus on the number you focus on, which is real GNP targeting. I'm somewhat like Lee Hoskins and Manley Johnson in that

regard. But there is one number here in the Greenbook that I do believe is a very desirable forecast, and that's nominal GNP. And I point out to you that our nominal GNP numbers in the forecast show the kind of decline that seems to me is consistent with our ultimate goals. It just seems to me it's somewhat dangerous for us in a policy context to be focusing on real GNP when we can focus on nominal GNP. When you look at the numbers there, you see that after 1984 we've only had one year in which the nominal GNP has been in the 7 percent range, and that was 1987. All right, we have in the staff forecast a 6.7 for 1988 and a 6.0 for 1989. It seems to me that if we can have a forecast bringing nominal GNP back down to the 4.5 percent that we had in 1986, that the right medicine is the monetary policy that brings that nominal GNP on down. I don't see how we get into trouble if we bring the nominal consistently down. So I'm somewhat satisfied with that kind of a policy background.

I'm going to hand out some charts here in regard to commodity prices. I do that somewhat reluctantly because I do not believe commodity prices are as good a signal as exchange rates are. I just believe that it's more politic to talk about commodity prices than it is to talk about exchange rates. And I think in some ways we're talking about the same thing. But, since the staff did get the experimental index into their chart show, I thought at least we ought to have a little background in regard to that experimental index. Now, first of all, the experimental index was designed to show the flow-through capabilities of commodity prices to the producer price index and to the consumer price index. And this index is a consumption-weighted index. Now, the chart that you have is a chart of the index without oil. A consumption-weighted index has oil very, very high; whether we're doing it or the IMF is doing it or anyone else is doing it, we end up getting very high weights for oil.

What our staff work has shown--and there has been some excellent work on the part of the Board's staff in this regard--is that year-over-year rates of change in commodity prices have been successful in leading changes in the rate of change in the CPI on the same year-over-year basis, and that most commodity indices tend to do that with a 7- to 9-month lead time, which seems to be superior to what the leading index does for the real economy. So, the first page that I've shown you there is this commodity index without oil in it. As you can see, this index has shown a downward movement and now is That upward jag is the drought effect. Now, I showing an upward jag. don't know what this index would have looked like without the drought. I can only suspect what it might have looked like. The second page shows the full index--I mean the index as it was designed. And the year-over-year rate of change clearly shows a turning point in this index which would be consistent with the CPI year-over-year rate of change peaking about September of 1987. If this proves not to be the case, then this constitutes a clear false signal. I don't know; it may very well have constituted a false signal because we have the full index saying one thing and the index without oil saying something So, I think it's a very uncertain case. else.

Ed Boehne gave us some data on the CPI and the PPI; and there again, I tend to look at the year-over-year rates of change. The CPI year-over-year peaked out at 4.6 or 4.7 last fall; it was down to 4.4 in December; it crept on down to 3.9 and stalled. I'm somewhat suspicious that the index may move back up above 4 again. With the

drought effects on food prices, I think that's quite likely. Now, the last page shows the commodity index, the full index with 1982 consumption weights. This one just happens to have a strange base of January 1986 in it. But for those of you who would understand what that might mean for some of us, that index gives some indication that monetary policy was successful in holding the deflationary environment that was occurring in 1986. It seems to me it does give some evidence of that, although the recent trend in 1988 is very suspicious; if you're a chartist and you draw the lines from 1988, you can say we have a problem. And, of course, I think we ought to lean against that wind by [adopting] the monetary policy prescription that the staff has outlined.

Now exchange rates, it seems to me, are showing something else in regards to the scarcity of money. I will not dwell on that item, but I would point out that even the staff, who apparently believe that the exchange rate in December '88--if I read the report correctly--will be about the same as it was in December '87--. Is that correct, Ted?

MR. TRUMAN. No, I think it's down a little, to 4 percent.

MR. ANGELL. Well, I thought we had had a 7 percent rise from December and you're projecting a 7-1/2 percent fall from June to the end of the year. So it's approximately--

MR. TRUMAN. I think you're probably right as far as December is concerned. You may remember that October, November, December had a considerable decline in it. So from the December level you're probably right, but from the aggregate in the fourth quarter--

MR. ANGELL. Okay, I'm just saying--

CHAIRMAN GREENSPAN. They were talking about a 7-1/2 percent annual rate of decline.

MR. TRUMAN. Annual rate.

CHAIRMAN GREENSPAN. So it's half from June to the end of the year, I guess.

MR. ANGELL. Well, okay. Whatever your projection is, I'm comfortable with the decided change that that shows. It does seem to me that exchange rates do respond to real monetary scarcities. And I think the automatic gold standard always worked if everyone wanted to make it work because it did alter the monetary growth paths for countries with balance-of-trade deficits.

I don't know about the drought. Some people seem to think that the drought is going to add to inflationary forces. I think there's a danger there that has to be guarded against. But I think the drought can possibly have deflationary impacts in the long run if we get past these first 6 months of it. What Gary Stern said last night struck me: that for those people in the Midwest where that drought is concentrated, there is a feeling that does have something to do with expectations.

One other thing I would mention is in regard to defense spending. I picked up anecdotal evidence which says that there are many small defense contractors around the nation who are not permitted to make any bids for any government contracts or to engage in any new projects of any kind due to the fact that they're dealing with a representative or lobbyist in Washington who is tainted. And I understand this to be a rather widespread phenomenon.

The final comment I'd make is in regard to the money markets. It just seems to me that in the last five months the money markets and bond markets have responded so well to the policy moves we've made. Some of you may not think they were policy moves, but it does seem to me that we've been attempting to lower the growth path of the monetary aggregates, and I would consider that to be a policy move. I think the bond markets have behaved so well because they have seen us responding in a pattern that they didn't expect and I think they believe that our timing has been appropriate. And I think it's important that we keep in mind the kind of timing that we've had. It seems to me that the Chairman has indicated a very [unintelligible] in carrying out the FOMC's views in regard to the tilts we've placed in [the directive]. And I guess I'd expect that to continue. Thank you.

# CHAIRMAN GREENSPAN. President Guffey.

MR. GUFFEY. Thank you, Mr. Chairman. With respect to economic activity, particularly in its relation to the Tenth District, as you know, we're dominated by agriculture, energy, mining, and manufacturing. Three of those activities--agriculture, energy, and mining--have been at very low levels. Agriculture has revived in the sense that it's on the recovery path, with evidence such as agricultural land prices continuing to increase 4 to 5 percent in a quarter, for example. Having in mind the impact of the drought, however, it isn't clear that that's going to continue. And if the drought does worsen--and that's a very iffy situation in the sense that a week or two of rain could wipe out virtually any impact of the drought in our District and would turn the pessimism back to optimism; and I think agriculture would continue on the recovery track.

Energy, on the other hand, is flat because of OPEC's indecision and the softening of oil prices. Drilling rigs have decreased in total numbers over the last month or two, although they're still about 8 percent or so above year-ago levels. Mining is in a recovery stage, but certainly not very brisk. Manufacturing is dominated largely by the auto and aircraft industry in the Tenth District. Because of production cutbacks, most auto plants--the ones that haven't been closed--are operating on two shifts. But that's far from being flat-out production. Aircraft, on the other hand, is booming--from the standpoint that both commercial as well as military orders are very great. And as a result, that industry is looking up.

With respect to your question about wage inflation or price inflation generally, we simply do not have any good evidence that has emerged that would suggest that that's present now, although I would agree with those who suggest that the feeling is right under the surface. People we talk to keep talking about inflation, although they can present no real evidence that it's accelerating. It seems to me that it may be one of those situations in which things have gotten better, both nationwide and in my District. And as things look pretty

good then—and we can't stand prosperity—you begin to look for those things that can destroy what you think is good today. And that may be what we're experiencing right now. The real risk, obviously, is that it becomes a self-fulfilling prophecy. We do see some wage increases in the public employment sector and particularly in the health [care] sector. Nurses, for example, are in very short supply nationally. Their wage demands are astronomical and they quite likely are going to get them simply because of the shortage in the supply of nurses.

With regard to the Greenbook forecast and the outlook for the next six quarters, we don't have any great divergence from the view that has been presented by the staff. I think our view would be that inflation would be a bit less in the remainder of 1988 but would indeed be greater than the staff forecast for the year 1989 as a whole--roughly 1/2 of a percentage point fourth-quarter over fourth-quarter. Some of that comes from the projected impact of the drought on prices. Our view is that there will be an uptick; it won't be a heavy impact unless the drought worsens very much in 1988. I think the staff would say that that would all kind of roll out early in 1989, but we think there will be an uptick in 1988; we see that continuing in 1989. And as a result, inflation from that component alone would be a bit higher than the staff forecast. But by and large we'd accept that forecast as being reasonable. I would agree with the earlier statement of Jerry Corrigan that the risk is on the upside and monetary policy will become a bit tight. Inflation will rear its ugly head. Vigilance! I quit.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. Thank you. Well, let me start with a report from my district, which goes all the way from Dulles airport to Constitution Avenue.

MR. BLACK. Also a part of ours!

MR. HELLER. Also part, or a subsector. The unemployment rate in the area is 1-1/2 percent, which is almost on [unintelligible] with the Japanese conditions, depending on your view. I haven't noticed any strike activity--that doesn't mean it isn't going on--but people seem to have some trouble hiring. As far as wage pressures are concerned, my own wage hasn't changed for 1-1/2 years but the Board seems to--

MS. SEGER. It won't change next year either.

MR. HELLER. It won't change next year either, thank you. But the President seems to have some trouble filling empty seats on the Board. But, after a year and a half search, he seems to have succeeded now, although there are still some obstacles in the way.

Now, let me point to the national picture. I think the only forecast I can really follow is the Greenbook forecast. And while I'm a bit more optimistic than the Greenbook forecast, I think there are some features in it that are already feeling pessimistic. The Greenbook has the growth rate dipping a year from now--that's the second quarter of 1989--to 1.7 percent. Domestic purchases at that time will be growing at a rate of 0.3 percent; the unemployment rate is up to 5.8 - 5.9 percent; investment is growing only at 1 or 2

percent; both the personal as well as the industrial structures are solidly in the minus column; the Federal Government is solidly in the minus column; capacity utilization is dropping. With all that happening, plus the low monetary growth that we've seen in the last year-and as I pointed out yesterday, we're still below the bottom end of last year's target cone--I don't see the big surge in inflation that some people expect. Governor Johnson has already pointed out very clearly what I think is happening: that past monetary policy really has helped to break that inflationary impetus that we have seen building up. Governor Angell, I think, said the same thing. The yield curve is flattening, long rates are coming down, the dollar is going up, and you see two sort of opposing trends in commodity markets. On the one hand, you have the effect of the drought; on the other hand [unintelligible] prices have been dropping very sharply in the last couple of weeks and that's often a fairly good inflation indicator, too. So, to sum up, I think we are already on slowing trends. We see the results of the tightness of policies that we instituted last year and in the early part of this year. And I would expect that inflationary expectations are on a downward trend. Thank you.

## CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Mr. Chairman, let me, if I may for just a moment, bring a slightly different point of view to this thing. My main concern is that we need to have a good economy in 1989 and forward from there. I'm asking myself what is liable to be the economic forecast forward from the second quarter of next year. And the reason for this is I think it's very important that the next President, whoever he is [unintelligible]--

[Secretary's note: The transcript of Mr. Kelley's remarks ends in mid-sentence; in addition, there is no record of Ms. Seger's comments on the economy. However, a general statement of their views is contained in their dissents from the policy decision at this meeting. Those dissents were included in the policy record of the meeting that was published several days after the following meeting. The transcript resumes with Mr. Kohn's report on the long-run policy alternatives.]

MR. KOHN. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Questions for Don?

MR. ANGELL. Yes. Don, in some ways my question arose and you partially answered it [in your report]. The lower [projected] inflation, with a 1.4 percent M2 growth rate in 1989, followed by 2.4 percent in 1990 and then a Treasury bill rate in 1990 of 9.2 percent, is so inconceivable to me. I just wondered: is it conceivable to you?

MR. KOHN. Well, the relationship is conceivable. In fact, these things are derived from cranking them through the money demand model. The M2, Treasury bill, and nominal GNP relationships implied are derived from cranking them through the Board staff's models of M2 demand. Now, whether the underlying strategy for monetary policy is credible, I think I'll leave that to the Committee. But the relationships in here are credible, entirely credible. I don't have

any problem with seeing the change in interest rates going with the change in GNP and the change in money.

MR. ANGELL. My comment would be that your model doesn't fit the financial world that I've learned to experience, and I would think that a Treasury bill rate of 5.2 percent would be more consistent in 1990 with that kind of M2 growth.

MR. KOHN. Well.--

 $\,$  MR. HELLER. But Don was still applying monetary restraint at that moment. Right?

MR. KOHN. Yes.

MR. HELLER. You're still stepping on the brakes and that produces the high interest rates.

MR. ANGELL. Yes, but the yield curve in that situation would be so inverted.

MR. KOHN. Inverted?

MR. ANGELL. It has to be an inverted yield curve unless the-

MR. BLACK. I think there's no explanation.

MR. ANGELL. Unless inflation is accelerating.

MR. KOHN. I think it's not--I don't have the outlook for the long-bond rate--

MR. BLACK. That's where the challenge is.

MR. KOHN. We would not have [the long-bond rate] increasing to the same extent as the Treasury bill rate; increases would be smaller. Whether the yield curve would actually be inverted at that time under these circumstances in the models, I'm not sure. But we have had situations like 1987 when we had very low money growth and rising interest rates. Your point, I gather, is one of inflation expectations and where real interest rates are and where nominal interest rates are. And I think if there were a real break--if the markets saw this, believed it, and inflation expectations took a substantial decline--then you might have a point. I'm not sure that the interest rate thing--

MR. ANGELL. Yes

MR. KOHN. I'm not sure that money demand would be that much different but, surely, the long bond would be considerably different. And then it would be a question of whether money holders trade off their savings deposits and time deposits.

MR. ANGELL. You probably haven't yet incorporated a commodity index inflation movement within your model, have you--with a feedback?

MR. KOHN. No.

MR. ANGELL. Okay.

CHAIRMAN GREENSPAN. Are there any further questions before we do another run around the table?

MR. BLACK. Don, you used an interesting term that I don't remember right now, but I think you really said you assumed expectations weren't rational in this low growth--

MR. KOHN. In our models, the expectations, as Mike Prell said yesterday, are backward looking. And then you have labor contracts and what not. Some things change slowly in those models; wage rates change slowly, as do prices to a certain extent in response to changes in output gaps, unemployment rates, and that sort of thing. So that's the reason why the lags are so long and the unemployment rate has to get so high to get this immediate, relatively short-run, effect for a 1990 inflation rate. If the expectations change more rapidly, then you wouldn't have to have quite as much restraint.

 $\ensuremath{\mathsf{MR}}.$  BLACK. What was that term you used? I want to remember that.

MR. KOHN. I can't remember it.

MR. BLACK. It was an interesting one; I should have jotted it down.

MR. KOHN. Well, maybe we can talk later; I'm not sure what you're--

CHAIRMAN GREENSPAN. Lee.

MR. HOSKINS. When I match up the Greenbook with alternative III, the implication under alternative III is that we're shooting for 5 percent M2 growth. So the question is: What is the Greenbook projection under that alternative?

CHAIRMAN GREENSPAN. The projection is 4 percent.

MR. KOHN. Yes, the projection under the Greenbook assumption is 4 percent. I think you're right--the markets probably will take the midpoint.

MR. HOSKINS. Yes, I'm trying to match the two up.

MR. KOHN. Yes.

MR. HOSKINS. You have a midpoint of 5 percent and I'm asking what the Greenbook forecast would look like under a 5 percent M2.

MR. KOHN. Oh, I see. It would be--

MR. HOSKINS. Because that's how the markets would translate it.

MR. KOHN. The Greenbook forecast under a 5 percent M2 would be something between the baseline and the stable interest rate forecast that Mike gave yesterday. That is, we'd have more M2, somewhat lower interest rates, and everything that went with that. But the 5 percent M2 would be consistent with some further rise in interest rates from where we are now, but not quite as much as we have in the Greenbook forecast.

CHAIRMAN GREENSPAN. Any other questions for Don? Let me add something to what Don has been saying. In one sense, we're looking at monetary policy in the short run as sort of the crucial thing to be discussed at this meeting. But, in a sense, this is the more relevant issue. If you go back to the 1960s, and especially the 1970s, my recollection is that toward the latter part of the 1970s we still had this acceleration of inflation expectations. You remember Milton Friedman used to draw the lines where the top of the highs of inflation were always successively higher and the bottoms of the lows were always successively higher. Despite that, until very late in the 1970s--I suspect really the middle of 1979--inflation expectations really never took hold. Long-term nominal bond yields were exceptionally low. All of a sudden the markets got the message and long-term rates went up, I think, 450 basis points between mid-1979 and early 1980.

MR. JOHNSON. They never got up above the short rates.

CHAIRMAN GREENSPAN. No, they never did; but what I think we were looking at was that inflation expectations really found their way directly into the long end of the market.

 $\,$  MR. JOHNSON. I guess what I'm saying is they never rose above the funds rate or short--

CHAIRMAN GREENSPAN. Well, I'm not sure that that's relevant to this issue, because [the definition of] inflation expectations in this context really has to be: what is the inflation premium embodied in the long-term interest rate? It's certainly the case that the structure of the yield curve is relevant, but not to this type of issue. The reason I raise the issue is that everyone's expectation was that we couldn't break the inflation psychology. And, indeed, this Board--or the FOMC--went through the torture of the damned in the years immediately subsequent to that to get inflation expectations out of long-term bonds; and it hasn't fully succeeded. The long-term nominal yields are still reflecting a degree of inflation that is a good deal higher than in the 1970s and the 1960s. This suggests that the market, having come down dramatically with respect to inflation, is going to do it in two loops--meaning, in effect, that inflation is coming back a little.

And if it starts going back down in the early 1990s--leaving out the issue of not getting to 5 percent--that probably will bring the long-term yields down in a nominal sense. And this suggests to me that the more important decision that the Committee has to make is on this specific issue. I think we ought to decide whether we believe that money supply is working or whether we believe it's no longer a relevant consideration. But unless we are willing to abandon all hopes of the monetary aggregates coming back as key elements within the financial system, the more I look at the numbers I can't quite buy

your lower inflation thing because I'm not sure it would work. I think that what would happen is that if we squeezed to that point, the economy would go into recession and political pressures would overwhelm us.

But certainly, I must say that alternative III looks like something which is, as far as I'm concerned, probably a minimum type of adjustment from current M2 ranges. Well, having already spoken, let me just say that I would opt for no change in 1988 but alternative III for the 1989 figures. Do you think we have time to go around before the coffee gets cold? Let's try. Governor Angel1.

MR. ANGELL. As for alternative II, I don't like quibbling with half a percentage point in these numbers. So the question is alternative III versus alternative I. I come out this way: I prefer that we do alternative III, but I prefer to make that decision next February. Just like a year ago, I preferred that we make the decision closer to the time because I believe it's important to have credibility. And I would certainly want the language of the Humphrey-Hawkins report to indicate that we anticipate doing that. But I really prefer that we not announce one now because I believe there is something in the neighborhood of a 20 percent chance that we will be back into a commodity price deflation prior to the beginning of 1989. And if that's the case I wouldn't want to make the move. So--

CHAIRMAN GREENSPAN. Are we required to announce--

MR. JOHNSON. Yes.

MR. BERNARD. Preliminary ranges.

CHAIRMAN GREENSPAN. We actually have to do it.

MR. ANGELL. We have to announce the preliminaries. Well, I'm going to vote for alternative I, but there's an 80 percent chance that I'll want to be at III next February.

CHAIRMAN GREENSPAN. Vice Chairman Corrigan.

 $$\operatorname{VICE}$$  CHAIRMAN CORRIGAN. Reaffirm the '88 ranges; alternative III for '89.

CHAIRMAN GREENSPAN. [Mr. Angell] are you reaffirming '88?

MR. ANGELL. Yes.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. I would strongly favor alternative III for 1989 and I don't have any problem with our current targets for 1988. One thing we might want to consider for 1988 is to go 4-1/2 to 7-1/2, which would narrow the M2 range to 3 points. You clearly have the visibility that I think we'd be comfortable with. And for M3, 5 to 8 because that looks reasonable as well. And I might point out that the staff has indicated that, due to different income and interest elasticities, it makes sense to have a little higher range for M3. So, I think we could stick basically with the substance of what we have for 1988, but just narrow the range a little.

CHAIRMAN GREENSPAN. You know, the ability for us to hold to a whole range for a year for no other reason than credibility is of value in and of itself.

VICE CHAIRMAN CORRIGAN. I think that's right.

CHAIRMAN GREENSPAN. It's not that I would disagree with you on that necessarily, but I think there is the question of whether or not we really would want to do that.

MR. PARRY. Well, we would be holding to the range. We'd actually be narrowing it.

CHAIRMAN GREENSPAN. We'd be narrowing it, yes.

MR. PARRY. I wouldn't want to change the midpoint of M2.

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. I agree with your prescription, Mr. Chairman, which is where most people have come out. There's one observation I'd like to make, though. I think there's one big weakness with this practice of setting one-year ranges for the aggregates, and that is that it doesn't really commit us to doing anything beyond that year in this. Governor Angell suggested a while ago that it is important that we target some nominal variable. He mentioned nominal GNP. I think it's a point, although certainly one can't be sure that it's a better variable to target than would be M2. [I'd suggest that you] announce, when you give your testimony, that our intention is to move further in the years beyond. If you look at the chart showing velocity of M2 in the Bluebook, that looks pretty darn constant over a period of 30 years. It's true that it jumped around more in the '80s, but it looks remarkably stable for an economic variable. And I would like to see you say that our intention is, given past evidence, and with a zero rate of change in velocity, to bring that down in the early '90s to about 3 percent--which I would interpret to be the long-run potential of the economy--or whatever you can get the Committee to agree to and feel comfortable about in saying something beyond '89. I think that would be very helpful to the markets. And I would certainly favor something of that sort.

CHAIRMAN GREENSPAN. President Forrestal.

MR. FORRESTAL. Mr. Chairman, I, too, agree with your analysis, and I would reaffirm the 1988 targets and opt for alternative III for 1989. I think it's very important that we send a signal to the financial markets and to the public that we're on our path of trying to reduce core inflation. I don't think that alternative III really represents a very restrictive monetary policy and would throw us into a tailspin in the economy. I don't like alternative II because I think that those half percentages indicate a degree of precision that we really don't have. So, I strongly favor alternative III.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. Ditto!

CHAIRMAN GREENSPAN. You want to expand that?

MR. PARRY. He wants coffee!

CHAIRMAN GREENSPAN. Governor Johnson.

MR. JOHNSON. I think I can live with alternative III. Don Kohn pointed out, though, that there is some risk that expectational adjustments will take place a certain way. We can find ourselves going backward at some point. And I think there's some risk that we might get ourselves in a situation where expectations do take effect and we end up with lower interest rates instead of rising interest rates; at some point we're going to get a velocity movement that's going to be in the opposite direction of what we anticipate. To hit a 5 percent nominal GNP you're going to have to compensate for a potential decline in velocity growth--I don't think that's totally out of the picture as a possibility--for me to feel completely comfortable with alternative III; that's why I like a 5-1/2 percent midpoint.

It doesn't bother me that we ratchet the targets down a half percentage point a year; we've been doing that for some time. As a matter of fact, we didn't even move them for a while, and a half percentage point was always viewed in the markets as a reasonable amount of progress. I must admit that, barring that scenario that I pointed out, the upper end of the alternative III range seems to give you plenty of room. And maybe we do want to give that kind of message to the markets. But simply because I am unsure about where we might be next February--. I would hate to end up having to back off next February.

CHAIRMAN GREENSPAN. Am I correct that you would expect to have to back off only if interest rates were lower, which would mean probably that inflation expectations are lower? And the market effect of backing--, there is no reason why we can't back up.

GOVERNOR JOHNSON. No. We can back up.

CHAIRMAN GREENSPAN. That's the whole purpose of the exercise.

GOVERNOR JOHNSON. I think that is right. I am just a little concerned at this point that a signal of stronger medicine of that degree to come might put us in that situation; but I could go with it. I am a little more comfortable with waiting as well, but I'd rather demonstrate a ratcheting down of the target than just hanging with the current one, I think--a little unlike Governor Angell. But I can live with III; I just think there's a risk of us backing up some.

CHAIRMAN GREENSPAN. President Hoskins.

MR. HOSKINS. Well, alternative III doesn't achieve the objective that I'm looking for over time, which is to ratchet down the rate of inflation. It leaves us with a midpoint that would be more inflationary than the Greenbook forecast, which is still at 4 percent. So, if I were to pick a number, I would certainly look at something like 2 to 6 percent, to focus it around what is consistent with the Greenbook; and 1 to 5 percent might even be preferable. If we are going to use something like III, then I think we ought to make it

explicit in your public statement that we are going to shoot for the lower end of that target range. Otherwise, the implication is that it's 5 percent. An alternative to that would be to narrow the range-leave the bottom end at 3 percent and pull the top end down to 6 percent. I can live with 1988 the way it is, but I think it's important to signal the markets that we're serious out in 1989. I think we'll get some benefits out of that without having to pay a price in terms of short-term interest rates.

CHAIRMAN GREENSPAN. So are you coming out for III or not?

MR. HOSKINS. Are we voting now?

CHAIRMAN GREENSPAN. No, I only wanted to--

MR. HOSKINS. I'd come out for III if we could make either one of those two adjustments.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. I'm for maintaining the current 1988 ranges and the 1989 ranges that go with II, essentially for the same reasons that Governor Johnson expressed. I think we should proceed slowly and save, if you will, some of that ammunition for the final determination of the ranges in February. I'd rather keep going forward at that point, like Governor Angell was saying, than having to backtrack early next year and then going to a higher range some time next year. I think it is more important for us to meet our targets and to show that we want to make some continuing progress.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Well, I will "ditto" Governor Heller exactly. I would reaffirm '88 and go for II at this time for '89, for the reasons he just articulated.

CHAIRMAN GREENSPAN. President Keehn.

MR. KEEHN. I'd maintain the '88 ranges and I'd be in favor of alternative III for '89. If I were fine tuning at all, I would widen the ranges when we are going through a period of some uncertainty, but the latter is beginning to clarify. This might be an opportunity to narrow the range again and perhaps go to 3-1/2 to 7. I don't feel strongly about that; I can live with III.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. I am in favor of maintaining the existing ranges for '88 and in keeping with my position this time last year, I think that it makes sense to maintain the same ranges for '89 because we do have another crack at this early next year, and it makes a lot of sense to keep our powder dry. And if we need to tighten further, I would certainly go to II or III; but in the meantime, I don't think the markets, as a matter of fact, think we are paying much attention to the monetary aggregates at the moment. We keep saying we aren't, so I don't know how it is that we are supposed to send this tremendous message to the financial markets by knocking these ranges down substantially at this point.

CHAIRMAN GREENSPAN. President Guffey.

MR. GUFFEY. Mr. Chairman, I would reaffirm 1988; I can accept alternative III for 1989. However, I would prefer to maintain the current 4 to 8 range for 1989 for the time being, with the appropriate language in your testimony that another look at the beginning of this upcoming year is something that we would look forward to.

CHAIRMAN GREENSPAN. [Your view is] similar to Governor Angell's?

MR. GUFFEY. It's somewhat similar, yes. The record of our ability to forecast has not been terribly good over time. And the fact that we are looking out 6 quarters, to me [unintelligible]. I'd rather keep the flexibility and look again in February.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. I favor sticking with what we have for '88 and alternative III for '89. And I'm inclined to agree with what Martha said about the market impact. I don't think the markets place a lot of weight on this. I think we are heading in the right direction and we ought to do that; but in the final analysis, if we had to violate the ranges in either direction I suspect as a Committee we probably would. And I suspect that's how the market probably perceives this.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Well, I have nothing to add. I'd keep the ranges we have for this year and go for alternative III for next year.

CHAIRMAN GREENSPAN. President Boykin.

MR. BOYKIN. I'd stay where we are for '88, alternative III for '89.

CHAIRMAN GREENSPAN. President Morris.

MR. MORRIS. I've always been uncomfortable with setting a range for the year in the middle of the preceding year. I am very sympathetic to the idea that we keep the present range at this point for 1989 and tell Congress that, if we are thinking in February as we think today, that we'd probably reduce it. But I think our ability to forecast velocity is so limited, that to try to set a range for 1989 in June of 1988--that is something. We've always done it that way; but, at the same time I know that once we set it in the middle of year one, it is difficult to revise it in the middle of year two. It develops a certain inertia and people get concerned about what would happen to our image, and so on. It seems to me that if we get into a pattern of keeping the existing range, and telling the Congress we'd be more comfortable setting the subsequent year's range in February, that we'd be better off in the long run.

CHAIRMAN GREENSPAN. Let's vote first on 1988. Unless I'm mistaken, it seems we have unanimity to reaffirm, but let's put that to a vote.

#### MR. BERNARD.

Chairman Greenspan Yes Vice Chairman Corrigan Yes Governor Angell Yes President Black Yes President Forrestal Yes Governor Heller Yes President Hoskins Yes Governor Johnson Yes Governor Kelley Yes President Parry Yes Governor Seger

CHAIRMAN GREENSPAN. Let me ask a factual question on the 1989 ranges. Do we have the custom of assuming that people are voting on I, II, and III as representative averages? Do we do this or what?

MR. ANGELL. Well, Mr. Chairman, in fairness, you have 6 people who have clearly shown that they favor alternative III. Even though I don't, I can vote for it; I'm not going to vote no. On that gesture, I think it would be a mistake.

CHAIRMAN GREENSPAN. No, I'm asking: Is the procedure here one in which one puts up a proposition on alternative III and asks yes or no? Is that the way it is run?

MR. ANGELL. It seems to me--

MR. JOHNSON. I agree with Governor Angell. I am uncomfortable with alternative III, but I would not want to record a vote against it, knowing there's a majority for it. I would like to show more unanimity than that.

MR. HELLER. How about half way--3-1/4 to 7-1/4?

 $\,$  MR. JOHNSON. We've already been polled; we know where we stand.

CHAIRMAN GREENSPAN. May I make a suggestion? As I've listened, there really is not disagreement here. What the issue really rests on is the forecasting ability of this group for a period that far ahead. Why can't I capture that in language in my testimony? So, I'd say that this is the intention, but recognize that it will be revised, as it has to be, in February.

MR. HELLER. Like President Morris said: a) it is very difficult to go back on what we have done; b)--

CHAIRMAN GREENSPAN. Well, basically I'm saying that no matter how you do it, it is an intention that inevitably will be reviewed. And I presume that this is not locked in concrete, as it shouldn't be.

VICE CHAIRMAN CORRIGAN. If you took the case that Governor Johnson cited, where something happened between now and February such that you had lower rather than higher interest rates, in those circumstances, I'd have no trouble at all myself with changing the targets in February.

CHAIRMAN GREENSPAN. It would be appropriate.

MR. ANGELL. I think there's just a little loss in credibility in doing that.

MR. HELLER. Then we are moving in the wrong direction. In that sense, it sends bad signals to the market, especially if you make some progress and you're getting lower interest rates. And then you say, well, now we are going to increase our monetary growth.

CHAIRMAN GREENSPAN. Let me say what I have to say.

MR. HELLER. I'd be very reluctant to reverse myself later on, having voted for it now.

CHAIRMAN GREENSPAN. If we go for alternative III and it turns out to have to be reversed, too, you would be in the same position. You are not going to tell me that--

GOVERNOR ANGELL. I prefer III to II.

CHAIRMAN GREENSPAN. Why don't we do this: Let's vote on III, with the understanding that the language [in my testimony] will try to capture the reservations that people have indicated.

 $\ensuremath{\mathsf{MR}}\xspace$  . HOSKINS. Those reservations are on both the high and low sides.

MR ANGELL. [Laughing] Well, you mean just one!

CHAIRMAN GREENSPAN. [Laughing] He's got several reservations! We are voting on alternative III.

### MR. BERNARD.

22111111CD :	
Chairman Greenspan	Yes
Vice Chairman Corrigan	Yes
Governor Angell	Yes
President Black	Yes
President Forrestal	Yes
Governor Heller	Yes
President Hoskins	Yes
Governor Johnson	Yes
Governor Kelley	Yes
President Parry	Yes
Governor Seger	No, reluctantly

MR. KOHN. Mr. Chairman, there is directive language that goes with these alternatives that is pretty straightforward. You can do it after the coffee break, if you prefer that. The language is on page 8.

### [Coffee break]

CHAIRMAN GREENSPAN. Can we reconvene? Jerry Corrigan has an interesting idea that he broached at the coffee break. I would like general views on it, as it would solve some of the problems we were discussing on the 1989 targets. Jerry.

VICE CHAIRMAN CORRIGAN. In listening to the conversation, I must confess that I was a little struck with the comments that Wayne Angell, Bob Heller, Frank Morris, Manley Johnson, and Martha Seger were making about the year-forward targets, as we are required under the law to stipulate in July. The thought that I mentioned to the Chairman was that, in connection with his testimony, he would obviously state that the Committee established the 1989 targets as they were just voted. He would then go through his usual song and dance about uncertainties, but he would take that song and dance one step further and specifically say that, indeed, the Committee was impressed with how much these uncertainties have increased, if anything, over time. Consistent with that, in the future the Committee may well show a strong tendency in July to merely restate the current year's targets for the following year. That would not necessarily always be the case, but there would be a strong tendency in that direction, simply as a further manifestation of the uncertainties that arise in trying to state the targets that far in advance.

# SPEAKER(?). Very good.

CHAIRMAN GREENSPAN. The advantage of that occurs in the event that we are in a position next February, for example, where the types of occurrences that have been expressed here do evolve and we are required to change. What we have done, in effect, while adhering to the requirements of the statute, is basically establish the notion that setting the 1989 ranges is clearly a problem in July 1988, and the fact that it turned out to be a problem in June or July of 1988 isn't that much of a surprise. That gives us, I think, a reasonable basis to change, which could be captured if we were to be very vague in the report and in my testimony, but I gather that really is inappropriate, given the Humphrey-Hawkins statute language. Jerry's notion, within the statutory language, creates the type of conditionality which I think that Wayne and Don and a few others have indicated.

MR. BLACK. Mr. Chairman, I have two problems with that. One is that you would be going into next year without having set any long-run targets.

CHAIRMAN GREENSPAN. I'm sorry; let me restate it. What Jerry is recommending is that we are actually stating the targets-specifically, alternative III--and instead of having some language around it about uncertainty and how the targets may be changed, that we stipulate that henceforth, starting in July 1989, we would assume that the then-current ranges would be automatically extended into the subsequent year but be subject to review in February.

MR. BLACK. My other problem is more serious. And that is, that I would like to see us state tentative targets over the long run that tell the market what we have often said in the past--that we want to get these aggregates down to the point that we've got noninflationary growth. To me, [the approach recommended by Jerry Corrigan] would show less resolve than I think [is desirable].

MR. BOEHNE. Mr. Chairman, I think what Jerry and the others are getting at is valid, but I'd like to suggest a slightly different wrinkle as to how to achieve it, which I think gets around a potential

difficulty. I would rather say that the uncertainty has increased and that it has become increasingly difficult to make judgments; that we will make our best estimate in July, but the [congressional] committees ought to understand that we may be changing or revising in February more than in the past. I think there is an advantage in saying it that way because it tends to be more in the spirit of the statute. Some years ago--I've forgotten exactly when it was--we didn't send up in July ranges for the following year, and Senator Proxmire said we weren't following [the statute] by what we were doing. This way, if you say that in the future we are just going to continue the current ranges into the next year. I think someone could say to you that what you're really doing, in effect, is revising the statute. If you go the other way and say we'll give it our best effort, but you ought to realize it is highly preliminary and almost routinely you might expect changes in February, then you do it more in the spirit of the statute, and I think it accomplishes the same thing.

MR. PARRY. I think I would agree with Ed; I don't like the suggestion that we indicate that we might be very likely to continue the prior year's target in July. I think we go through a very serious exercise here. It is clear that the staff has done that and I think staff at each of our Banks has done that as well. if we are going to do it in a serious way, I think we ought to pay some attention to it. You know, we just don't have to do much work if what we're going to do most of the time is indicate that we are going to retain the current year's target for the next year. I don't see any virtue in that. I hink Congress ought to realize that we are trying to do the best we can and be aware that, at times, we may change it in one direction or another come February.

CHAIRMAN GREENSPAN. In the context of this further discussion, let me just read--and throw into the well--two paragraphs suggested by Don Kohn. The first is: "The Committee will be reconsidering the ranges in early 1989 and recognizes that they could be changed, depending on conditions at that time." Another alternative is: "It was understood that all these ranges were provisional and that they would be reviewed in early 1989 in the light of intervening developments." At any rate, those are two more suggestions.

MR. ANGELL. I like Don Kohn's second suggestion best of all. I would prefer that we not make it seem as if we are really all that uncertain about these. I don't like the qualifications that might make it seem we are not going to stick with them. I prefer to have something very simple, like Don Kohn's second suggestion.

CHAIRMAN GREENSPAN. Don Kohn's second one, I must admit--

MR. HELLER. Can you read it again?

CHAIRMAN GREENSPAN. It was understood that all these ranges are provisional and that they would be reviewed in early 1989 in the light of intervening developments.

SPEAKER(?). Isn't that what we always say?

MR. HELLER. I think, Mr. Chairman, that the problem will go away anyhow, now that we're getting them down to a range--you know,

the midpoint is 5 percent--which Professor Friedman has always advocated as a permanent growth range from now until eternity. So, I think in the near-term future we won't have these problems any more.

SPEAKER(?). Is that Ben Friedman? [LAUGHTER]

MR. HELLER. We can go back to a one-day meeting! [LAUGHTER]

CHAIRMAN GREENSPAN. Does anyone have any objections to Don's language?

MR. MELZER. The adjective "provisional" could be confusing because we talk about the provisional range for debt all the time.

SPEAKER(?). How about "tentative"?

SPEAKER(?). How about "preliminary"?

SPEAKER(?). The statute says preliminary.

SPEAKER(?). I like the word provisional.

MR. MELZER. It is a good word. I am just pointing out that we also use it in another context all the time for the debt range.

CHAIRMAN GREENSPAN. Is that a problem?

MR. BERNARD. The previous sentence that comes right before this has to do with debt. The way it was drafted was: "The Committee provisionally set the associated monitoring range for growth in total domestic nonfinancial debt"--

SPEAKER(?). Take that one out.

CHAIRMAN GREENSPAN. Why don't you read the whole paragraph?

MR. BERNARD. The paragraph for 1989 with the alternative III ranges--it's at the bottom of page 18 in the Bluebook or, if you're looking at the other document, it would be page 3, lines 56 to 60--would read as follows: "For 1989, the Committee agreed on tentative ranges for monetary growth measured from the fourth quarter of 1988 to the fourth quarter of 1989 of 3 to 7 percent for M2 and 3-1/2 to 7-1/2 percent for M3. The Committee set the associated monitoring range for growth in total domestic nonfinancial debt at 6-1/2 to 10-1/2 percent. It was understood that all these ranges were provisional and that they would be reviewed in early 1989 in the light of intervening developments."

There's another paragraph on M1. It reads: "With respect to M1, the Committee reaffirmed its decision in February not to establish a specific target for 1988 and also decided not to set a tentative range for 1989. The behavior of this aggregate in relation to economic activity and prices will continue to be evaluated in the light of the behavior of its velocity, developments in the economy and financial markets, and the nature of emerging price pressures."

MR. JOHNSON. I would like to ask one more question. [Unintelligible] I don't have any problem with that, but I'd like to clarify one more thing with Don Kohn. I should have asked this earlier, but it is not going to change anything. Going back and looking at the [unintelligible], the staff forecast is 6 percent nominal for 1989--

MR. KOHN. It's 6-1/2 percent, I think.

SPEAKER(?). 6-1/2.

MR. JOHNSON. That's what I said--around 6. The central tendency of the FOMC members is around 6. The midpoint on this alternative III is 5 percent. Anybody who looks at that is going to say, well, the trend rate of M2 velocity is zero, and that automatically means that the Fed is targeting higher interest rates. Is that going to be obvious to people?

MR. KOHN. It's not really that obvious. I think it would imply some small increase in interest rates, but it depends on what happens over the second half of this year. It is very hard to say until you know what happens in the second half of this year what the velocity would be next year, because whatever might happen in the second half, interest rates have a [unintelligible]. It's not necessarily--

 $\,$  MR. JOHNSON. But they can draw that conclusion from what has already happened.

MR. KOHN. It is close. I think if rates were held about steady here, with the staff's GNP forecast you'd probably get something on the order of 5-1/2 percent [M2 growth] next year. So, it would be a small increase in velocity, just with the lagged effects of what we've done through yesterday. At least that's what the models say. It is not that obvious--especially with 4 points in the range.

MR. JOHNSON. I didn't want anything obvious. I would be uncomfortable with somebody looking at the range and seeing a big interest rate increase just to get the velocity number. Okay.

MR. MELZER. On that M1 sentence--again, this is just a drafting issue, but we are saying that the behavior in relation to economic activity and prices will be evaluated in light of economic developments and emerging price pressures. Somehow it seems redundant to me. It's not a big point, but I think we could do a better job drafting this.

MR. KOHN. You could just take out "in relation to economic activity and prices." One question is whether the Committee wants to shorten this thing at all. We felt that this had been repeated sufficiently.

MR. MELZER. That probably is a good way to fix it, Don.

MR. KOHN. [Unintelligible] repeat this rationale so maybe this aggregate will continue to be evaluated in the light of its velocity.

[CHAIRMAN GREENSPAN. Mr. Kohn.]

MR. KOHN. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. May I make a comment on that? We will be discussing, probably in both the testimony and the report, something that captures the discussions we had on the monetary base-what it is that we concluded -- and I might also mention the focus on future research relative to that. Let me just raise a couple issues here. When you look at the number of pieces of information that will be coming out in the next several weeks, we are going to be confronted, I think, with a lot of potential changes that we cannot effectively foresee. That includes the resolution of what is an extraordinary rise in the exchange rate, which really is something of a surprise and has to be a part of anything we are considering relative to what we are going to do with respect to policy. As a consequence of that, I think we should have a telephone conference in a couple of weeks--after the employment data, and probably after the PPI data, are released -- to review whatever it is that we agree to I suggest that because I don't think that I would feel comfortable with a directive covering the next six weeks, given an economy with a capability of doing a lot of things that are shifting all over. In that context, and listening to the economic forecast, I would opt for asymmetric language toward tightness and I very much think that it would be appropriate to add an additional \$50 million to the borrowing, which would bring total borrowings up to about the \$600 million level. I would opt for that, if for no other reason than, as I understand it, that we probably need to be at that level to reaffirm the 7-1/2 percent funds rate we have in the market currently, and that is where people in the market essentially expect it to be. My concern is that we not be perceived to be reversing policy; and I think that putting that sort of posture forward gives us the flexibility to decide, under whatever conditions exist in a couple of weeks, either to move or not to move thereafter. Mr. Boehne.

MR. BOEHNE. I have two issues that I am trying to balance One is how I foresee the risks in the economy and inflation, and the other is that we snugged just a week ago. Taking those two issues into account, I would prefer that we maintain the existing degree of pressure on reserve positions. I would have an asymmetric directive on the side of tightening. Under alternative B, I would round down those halves so that instead of 5-1/2 percent for M2 I would make it 5 percent, and instead of 3-1/2 percent for M1, I would make it 3 percent. I think your advice about having a telephone call is well taken. On the business of being worried about whether the funds rate is 7-1/2 or 7-3/8 or 7-5/8 percent, again, I think we ought not peg that so tightly. I have no problem with borrowed reserves at \$550 to \$600 million or something like that. But I don't think we should worry that much about whether the federal funds rate goes up an eighth or down an eighth. I think it'll be good to get back to our pre-October 1987 posture on that.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. I would support what you have in mind. I don't perceive the move on the telephone call--I guess it was last week--or what you're proposing now, as really pegging the funds rate. What I perceive it to be is an intelligent move which the market really has

discounted—and perhaps it has discounted more tightening than, in fact, we've undertaken. Not only has it discounted it, but it has discounted it very constructively, if you will, in terms of how markets are performing. I think we would all generally agree that we're in an environment where probably more [tightening] will be necessary. I perceive what you're suggesting here is that we take advantage of that and just validate a rate and a policy expectation that's already discounted in the market. And on that basis I would do it. In terms of the policy record, I don't know how we could communicate it in such a way that it doesn't appear that the Committee has in two successive weeks here taken two further tightening actions. There's probably a way to handle it, in terms of words, so it doesn't come across that way. I think that would be desirable. And I would favor the asymmetric language.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. Mr. Boehne said it pretty well. There is good reason to maintain the current posture, especially in view of the high dollar that we're seeing at the present time. If you see a marked turnaround in markets, international or domestic, then I'd say in two or three weeks, or whenever that occurs, we can have a conference call and change our policy posture as may be appropriate at that particular time. So, I'd be for the \$550 million borrowing assumption and a conference call. I don't know whether a conference call means we are asymmetric or not. I think I'd rather have the Committee take action than have the Desk automatically do it.

CHAIRMAN GREENSPAN. Well, I don't think the Desk is just basically a [unintelligible]. The asymmetric language indicates the direction in which the Desk would be leaning without necessarily acting.

MR. HELLER. Yes. As long as that's before it happens and the phone call is not a reaffirmation of action. That's what I'd like to see. I'd be glad to go along with the asymmetrical language, with a phone call.

CHAIRMAN GREENSPAN. Mr. Hoskins.

MR. HOSKINS. Just for clarification: Is that [telephone] meeting a conference or is it a vote?

CHAIRMAN GREENSPAN. It could be either. It is a question of whether something of great significance happens or if we agree that nothing has happened. It's only that it is possible that we may get a significant move in the exchange rate; we may get some very significant data which may change the psychology of the market as a consequence of the payroll data. We've got the PPI coming out, amongst a lot of other figures. So, it's a type of period when I think it's useful for the Committee to be a little more active because there are crucial decisions to be made. President Black.

MR. BLACK. Mr. Chairman, I guess the real question is whether we've done enough up until now. If you look at the real activity signs, I guess that would say probably we have; but if you look at the recent behavior of the aggregates--unless that's an aberration of some sort--that says we haven't. My guess is that we

haven't done quite enough yet, so I was thinking in terms of that level of borrowed reserves that would be associated with an expected federal funds rate of 7-3/4 percent. But I could live with what you're suggesting, with an asymmetric directive and the understanding that we get together in a couple of weeks and take a look at it.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. I guess my preference would be for alternative "C", because I think all of the analysis we have seen over the last two days would support it very strongly. As a fallback position, though, I think I could see taking it in a couple of bites. I must admit that a move up to \$600 million on borrowing is not quite the size of bite I had in mind; but if we were to make some move now and then agree to talk about this in a couple of weeks, I certainly could go along with that.

CHAIRMAN GREENSPAN. President Forrestal.

MR. FORRESTAL. Mr. Chairman, on the basis of the forecast, my preference when I came into the meeting was for some slight tightening--and by slight I mean something around \$100 million additional to the borrowing target. That would be somewhere between "B" and "C". But in light of the uncertainties that you see in the additional data that will be coming in, I don't have any strong objection to doing it in stages. I would like to point out, though, that in my mind there is a problem with that, in the sense that if we keep doing this in small bites and we keep responding to individual pieces of information, we're taking a shorter-term view than I think the Committee should be taking. I think that we need to be more forward-looking and not seem to be reacting to individual pieces of information. I think that's what the markets are doing at the moment. They're focusing on very short-term considerations, and I think we ought to be more forward-looking.

The other thing I would say, I think Tom Melzer was saying as well. We ought to take advantage of the seasonal pressures that are in the market and do pretty much what we did last time--that is, take advantage of what the market is doing with respect to the federal funds rate. But the bottom line is that I would go with your suggestion. And I would certainly want to have an asymmetrical directive.

With respect to the directive, if I may, I would like to make two other suggestions. Since the focus of this discussion this morning seems to be on inflationary pressures, it would seem to me logical to put that phrase "indications of inflationary pressures" first in the directive. In a more general sense, the language in the directive keeps talking about--and we've used this for a long time--the strength of the business expansion and I wonder whether it wouldn't be better, given my predilection for a longer-term view, to say the strength of the forecast for the business outlook rather than expansion.

CHAIRMAN GREENSPAN. I don't know whether we shouldn't try to embody that in the 1989 question. It's a little too sensitive to capture in the operational paragraph because that paragraph is essentially the short-term instruction to the Desk. And I was

wondering whether or not we can't capture what you're trying to do in the Humphrey-Hawkins report itself.

MR. FORRESTAL. Well, that would help. Even though it's short-term and is a direction for the Desk, I still think it can embody that other concept.

CHAIRMAN GREENSPAN. Sorry--[could you repeat that?]

MR. FORRESTAL. Even though this is a short-term directive to the Desk, I think you still can embody that longer-term forecast and outlook in that language, but I don't feel strongly about that.

CHAIRMAN GREENSPAN. I think you can but the trouble is you may be putting a lot more in there than we need. However, I think we can catch the philosophy you're suggesting because it's certainly the philosophy of the Committee. And we could capture that in the report. President Keehn.

MR. KEEHN. Mr. Chairman, I agree with the direction you're suggesting, but I might get there a slightly different way. I wonder if there hasn't been enough movement in the rates that a change in the discount rate would be appropriate. I think I understand the tremendous sensitivity about that, but I wonder if it couldn't be explained as rather a technical move, perhaps a following move, at this point. And if the Board members were to do that, then the borrowing level would be adjusted accordingly. If you were not comfortable with that, then I would agree with the increase in the borrowing level to \$600 million with asymmetric language.

CHAIRMAN GREENSPAN. Let me just take a minute on that. One thing we do have to avoid is an international ratcheting game between the United States, the Germans, and the Japanese. We are in continuing consultation with them and we are all trying to avoid that sequence. I'm not certain they would agree at this stage that, with a move on the discount rate, we would not trigger a set of circumstances [that would lead to a ratcheting of rates]. First, if we change the discount rate, which the markets are not expecting, we'd probably have the dollar go up 3 yen and 3 pfennigs pretty quickly. And I think that would almost automatically require that the Bundesbank match it because they are under severe political pressure with the exchange rate weakening for them. So, one of the things that we have to be careful about—and I might add one of the reasons why I think we have to calibrate in the way that we are—is that we have to be very careful not to trigger an international competitive spiral. I think that is not an inconceivable risk here.

MR. BLACK. Mr. Chairman, this gets us into an awkward position with regard to our boards of directors. When we first sent in our recommended increase in the discount rate, we had in mind a half point increase in the federal funds rate, which we virtually have achieved. That would suggest that we really ought to withdraw our recommendation, which is hard to explain to them because we can't really tell them what the System has done at the Open Market level.

CHAIRMAN GREENSPAN. That is a--

MR. BLACK. It gets into a ticklish position. We did withdraw our first one for that very reason. We had gotten up to where we wanted to go, so we withdrew it and then decided it needed to go more.

CHAIRMAN GREENSPAN. But what may solve the problem--we can handle it, I think, if I announce in my testimony what we have done at that point.

MR. BLACK. Sure, that would be very helpful. I've been debating what I would say to them because I can't really tell them what I know.

MR. PARRY. Except you can say that money market rates have moved to the level--

 $\,$  MR. BLACK. As I say, the market assumes that the System has tightened.

MR. HOSKINS. Why not have a following discount rate move? If we believe the discount rate should be roughly in line with other rates, then we could probably get by with having it move up. My concern is that if we move ahead on the funds rate and we leave the discount rate behind, it's going to get more difficult to raise that rate the further forward we go. And I have some concerns that we're just dropping that rate as any kind of a useful tool at all.

CHAIRMAN GREENSPAN. At some point we're going to have to do something.

MR. JOHNSON. Yes. I was going to say--at some point I think if we decide that we have to lock in the structure, obviously that's what you want to do. I think there's still enough uncertainty out there, at least on my part, that I wouldn't want to lock that floor in. But there will be a point, obviously, when that needs to be done.

MR. BLACK. And therein lies another problem for the directors because, under our new procedures, if we haven't gotten a recommendation in, they are not going to be in that first wave. And that's going to be very disappointing to them.

CHAIRMAN GREENSPAN. Should that event come, we will try to be--

MR. BLACK. I think it will be very helpful to give them a chance to join.

MR. JOHNSON. It might be useful if they understood that, to some extent, movements in the funds rate were embodying what their preferences were.

MR. BLACK. Well, that's what we really told them.

MR. JOHNSON. I think if they can understand that, then they shouldn't be disappointed on the discount rate--as long as we're getting it done one way or the other.

MR. BLACK. I don't think they are all unduly disappointed, but it's awfully hard to tell them the full rationale for your recommendation when you really can't tell them what the Open Market Committee has decided.

MS. SEGER. Maybe we ought to consider announcing promptly what we do; then you could tell them.

MR. BLACK. That would solve that particular problem, Martha.

CHAIRMAN GREENSPAN. And create others. President Stern.

MR. STERN. I like your suggestion, Mr. Chairman. To me, the key thing at this point is the asymmetrical directive. I don't feel personally that it's necessary to do much immediately, but as I noted earlier—and many of us discussed this—I think the risks are on the side of more inflation looking down the road. And I would like to be positioned to address that if and when it's appropriate. I certainly can support raising the borrowing target to \$600 million associated with alternative B. I don't view that as having much of an effect one way or the other at this point.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. I'm pretty much where Gary Stern is. I would prefer not to make a further move at this point and to have asymmetric language. But I'm comfortable with your suggestion and would be happy to support it.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. I'm in favor of maintaining the present degree of reserve pressure with asymmetric language, and reconvening via telephone in the next two or three weeks. In fact, it seems to me we could even wait until that time to put the extra \$50 million in the target because, as I understand it, the fed funds rate is running right around 8 percent at the moment.

 $\,$  MR. STERNLIGHT. This is on the statement date today; it was 8 percent earlier today.

CHAIRMAN GREENSPAN. I'm sorry, what was that?

MR. JOHNSON. Statement date.

MR. STERNLIGHT. Today is the quarter-end statement date. Funds were trading earlier in an 8 percent area, even a little higher. We did some early repurchase agreements and the funds rate came down below the 8 percent level the last I heard. It is still pretty high.

MS. SEGER. It has been up close to 8 percent even before today, though, hasn't it?

MR. STERNLIGHT. Well, yesterday.

MS. SEGER. Thanks.

VICE CHAIRMAN CORRIGAN. Well, that's the end of that.

CHAIRMAN GREENSPAN. I assume that with \$600 million we will drift back to 7-1/2 percent.

 $$\operatorname{MR}$.$  STERNLIGHT. When we get past the quarter-end pressures, I would expect that, certainly.

 $\,$  MS. SEGER. I guess I don't have that much faith in the accuracy of our models.

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN CORRIGAN. Since I'd be between "B" and "C" anyway, I'm quite comfortable with the formulation that you put on the table, Mr. Chairman.

MR. JOHNSON. Maybe I should--is there anybody else?

CHAIRMAN GREENSPAN. Yes, go ahead.

MR. JOHNSON. I'm sort of like Gary Stern, Mike Kelley, Bob Heller and others who have said they would like no change at this point but that the risks are asymmetric. My view is that that's where the greatest probability is. My preference would be generally no change, but subject to review at some point with the probability that we might move. However, the Chairman has indicated a willingness to go \$50 million additional on the borrowing, and I think if there really is a risk of the funds rate settling back below the 7-1/2 percent, I can live with going with \$600 million now to avoid that.

I think the funds rate is important. I've never viewed this as targeting fed funds unless you leave it stable all the time. My view is that you want to move it, but you want to give a message with that funds rate, and I guess you should be willing to move it as you need to. So, I think the 7-1/2 has a significant message, and basically I think the markets have discounted it, as Tom Melzer says. And I wouldn't want to see them get a different impression from that. So, if in fact going to \$600 million means a 7-1/2 percent funds rate, roughly, I can support that. I can also support the asymmetric language, but I would want to make sure that that doesn't mean it's automatic. I think that the conference call should be purely for review, and there's no automatic move on borrowing at that stage. We may actually feel totally differently when we review the evidence. As long as that's well understood, I think I can support this directive.

CHAIRMAN GREENSPAN. President Guffey.

MR. GUFFEY. Mr. Chairman, I, too, would agree that your proposal is reasonable and quite acceptable, with one proviso, however--that \$600 million does indeed mean 7-1/2 percent and not greatly over that level. My point is that it seems to me the next step in the tightening process quite likely is the discount rate. And in my own view, it would be an inappropriate action to tighten further now. As a result, your proposal of going to \$600 million, if that really means a funds rate of about 7-1/2 percent and not greatly higher than that, is very acceptable to me.

CHAIRMAN GREENSPAN. I think President Hoskins is next.

MR. HOSKINS. Yes, I'm ready. I guess since a \$200 [million increase in the borrowing target] made the markets happy, maybe we ought to consider that again! But I don't think there's much support for that. To try to reduce inflation at all in 1989, I think we would have to move at least 50 basis points before the end of the third quarter. That would imply a "C" path to me. A trade-off obviously for the "C" path, given what Peter Sternlight said yesterday with respect to a discount rate move causing the funds rate to rise, would be living with a "B" path with a discount rate increase.

I have some reservations similar to President Forrestal in respect to reacting, or appearing to react, to incoming information on an every two-week basis. I think the market has been doing that and I think we should try to set a tone of a little more stability than that. I also am concerned that this tit-for-tat kind of following market rates up may not get us out in front of inflation. It's like trying to nibble it to death, it seems to me. And it's not clear to me from our moves to date that we've tightened significantly. If you look at the monetary aggregates, which is the point Bob Black made, you could make a case that we haven't changed much at all. If you look at bank credit, we had two months of pretty strong growth relative to the last 6 months. So, the concern would be that if the markets are moving rates, while we're allowing them to go up, in fact, we're providing more reserves than--

MR. JOHNSON. You've got a point on the reserve thing, but on the rates, the funds rate has basically led all the other short rates. It's higher than the T-bill, commercial paper rates, and everything else. Your point on reserves is well taken, but we've certainly been ahead on the short rate issue. Some of that could be the supply problem but--

MR. HOSKINS. Yes. It's just very difficult for me to untangle. I think you understand what I'm concerned about--that it's not obvious to me that we're ahead of the game all the time. So I guess my preference would be for "C". But I think if we were to move with the \$50 million now and seriously consider \$100 million if the data that you're concerned about come out to support that kind of move, then I could live with your suggestion.

MR. HELLER. Another \$100 million then or--

MR. HOSKINS. Yes.

CHAIRMAN GREENSPAN. Governor Angell.

MR. ANGELL. Borrowing of \$550, \$600 million-how important is that? Borrowing of \$600 million with a 7-1/2 percent fed funds rate is a return to what we decided not to do. I just don't understand how we could do that. We voted to follow a borrowing target, and the present level of our borrowing target is \$550 million. And if we tighten, we tighten. Now of all the times to choose to tell the markets we're tightening, this is the lousiest time I have ever heard of. I mean, the markets have received so well what we've done. It has been an immaculate arrangement of achieving objectives. And I don't see how we're going to go in here and do this. I'm reluctant to have to vote "no". But in the past I've gone along, and every time I've been sorry. We did this last September. We had a deal; we said

what we'll do is increase the borrowing. But we didn't do it. And then the markets discovered it 3 weeks later and the timing was just as bad as it could be. I just don't understand why we can't maintain present borrowing pressures; then we will know what we're doing. There will be no misunderstanding. Why not have a conference call in the meantime if something happens? I don't know what the dollar is going to do, but if the dollar rises and continues to rise--sometimes if you're in the financial marketplace and you want to go bet against what the market's doing you can go ahead and do it if you like. This dollar might have more [room] to run up than it has to go down. If it does, it would seem to me that it could very well get that much more top heavy, that much more over where the trade requirement is. And I want to have some ammunition to do it when it's time to do it.

CHAIRMAN GREENSPAN. You're trying to say that going from \$550 million to \$600 million is going to do all that?

MR. ANGELL. I'm saying that going to \$600 million is either going to cause us to abandon borrowing targeting and make it be 7-1/2 percent or--

CHAIRMAN GREENSPAN. No, no; leave the 7-1/2 out. I'm trying to follow you as to why going from \$550 million to \$600 million is going to create all the problems you're suggesting.

MR. ANGELL. Well, if it's not a problem, then there's no problem leaving it at its current level. If \$50 million isn't important, there's no problem leaving it at \$550 million; and then when we have our conference call, let's go to \$700 million if we need to.

CHAIRMAN GREENSPAN. No, it's a legitimate question as to whether you want to be at \$550 or \$600 million. But the presumption that you're creating is that going from \$550 to \$600 million is going to create some crucial unwinding, which strikes me as rather unlikely.

MR. ANGELL. Oh, I believe it is. I believe the long bond market is poised; I think it has accepted what we've done so far in a marvelous way--

CHAIRMAN GREENSPAN. But there's no--

MR. ANGELL. But I think to tighten at this moment in time with nothing out there--

CHAIRMAN GREENSPAN. That's not true that nothing is out there. What is out there are potentials of inventory accumulation; in fact, the May figures that just came in today do show a bit more inventory accumulation than I thought we were getting. The crucial question I think we ought to ask is: What happens if we're wrong? Supposing that we go to \$600 million and that's the wrong judgment, in retrospect. What's the down side? And the down side strikes me as really quite minimal at this point, because I don't think anybody is perceiving the issue of a significant weakening occurring in the economy at these rates. We haven't even started really serious inventory accumulation. If we had an overhang of inventories I could readily imagine this whole thing tilting over. One extraordinary aspect of the success that we have had to date--namely the tilting of

the yield curve--is the fact that we are getting a lower long-term bond rate and hence, more effective demand coming from those areas of investment; it's the investment parts of the economy which reflect long-term interest rates. And we've got short-term rates where they probably are beginning to bite on the inventory picture. That strikes me as about right.

MR. ANGELL. But I see the inventory thing just the opposite. It seems to me that tightening is going to accumulate more inventories, not less inventories.

CHAIRMAN GREENSPAN. Well--

MR. JOHNSON. Involuntary--

MR. ANGELL. Because you're going to slow down final demand.

CHAIRMAN GREENSPAN. Yes, but if the tightness has moved long-term rates down, there's far more final demand that sits in the long-term bond market than sits in the short end.

MR. ANGELL. But it has occurred because our tightening has made sense to the markets.

CHAIRMAN GREENSPAN. Yes, and there's every reason.

MR. HELLER. I think it has effected a slowing in the economy.

MR. ANGELL. And this week is not the time to tell the markets we're tightening.

CHAIRMAN GREENSPAN. But wait a second. The markets believe implicitly in the fact that we are in the process of tightening in a gradual way. If we put \$50 million into the borrowing, it's just not credible to me that that can have any significant effect other than to reinforce the market's view that we're gradually tightening. We've been gradual and very responsible in this.

MR. JOHNSON. I think I know exactly what you mean, Wayne. I think what Wayne is saying is this: If the record of that \$50 million change is announced to the market as a further tightening move, even though the funds rate may not move at all from where it is, that would be [a concern to him]. Is that what you're saying, Wayne? Obviously, if it doesn't move the funds rate, in my opinion, it's not a further tightening. But I think you're saying you don't want to be seen on record as having raised the borrowing target at this point.

MR. ANGELL. That's right. In other words, if we really went to \$600 million and the existing fed funds rate reflects \$600 million, I have no problem. But my understanding is that Peter and Don have been following a \$550 million target. And if you change a \$550 million target to \$600 million, the best Fed watchers know that we've snugged. Does anybody disagree with that? The best Fed watchers know we've snugged.

MR. JOHNSON. Sure.

CHAIRMAN GREENSPAN. Not on \$50 million, they wouldn't.

MR. ANGELL. They do.

MR. HELLER. I think the last time they did.

MR. ANGELL. They already know we did. The best watchers know we snugged. And then [do we want] to do it again and to have them say we did it again with this timing and possibly the dollar where it is? I'm ready to go to \$700 million when we need to or I'm ready to go to a discount rate change if we need to.

CHAIRMAN GREENSPAN. Well, the problem is that you don't want to go to \$700 million. I could turn the arguments around and be on the other side of this thing if you start to talk about \$700 million, because what we do now is basically in advance of events. I think we have been ahead of the power curve. We have been surprisingly, successfully, ahead of what is an emerging inflationary process. In fact, I think it is very difficult to find a period such as this in which Fed policy has done as much as it has. The one thing I just absolutely find unacceptable is that we throw away any of the gains that we have made. And the notion that we are moving into a period where the the economy is still quite strong, and we decide to wait and see, strikes me as risking at this point the loss of what we've accomplished since we started to tighten.

MR. ANGELL. You mean to say that staying at \$550 million, which would maintain the existing arrangement, and having a telephone conference call in 2 weeks, or 1 week if we need to, is different from going wherever you want to go at that time--whether it's \$600 or \$650 or \$700 million?

CHAIRMAN GREENSPAN. Yes, because what it basically does is it reaffirms the asymmetry of our approach toward this particular market, which the financial markets have very clearly indicated is exceptionally appropriate policy. And it is terribly important for the adjustment process to keep that in place.

MR. JOHNSON. I think we need some clarification, though, on what \$550 million and \$600 million mean.

MR. KELLEY. That's right.

MR. JOHNSON. Before we get too deep into this. To the Desk and to Don, what does \$550 million mean? Is \$550 million going to cause the funds rate to settle back down below 7-1/2 percent?

MR. STERNLIGHT. I think it's terribly hard to say, Governor Johnson. When the Committee had its conference call on June 22, we were looking at funds rates that had come up to 7-3/8 to 7-1/2 percent; and we thought then that putting in place a \$550 million would tend to validate and accept that. Over the final week of the month, we've gotten higher funds rates with these quarter-end pressures. In the period that ended yesterday, we ended up with borrowing at \$520 million; we never did get even the modest bulge that we thought we'd get on the final day. And I guess the funds rate averaged about 7.57 or 7.58 percent for the 2 weeks--I don't know, I don't have the statement.

MR. KOHN. 7.58 percent.

MR. STERNLIGHT. My guess would be that as these quarter-end pressures fade, the funds rate will get back toward something like what we looked at in mid-June--if we stayed at \$550 million that we'd get back to 7-1/2 percent or a shade under. So I feel comfortable saying that with \$600 million it'd likely be around 7-1/2 percent, but I couldn't argue strongly that it would not be 7-1/2 percent or a shade over also.

MR. ANGELL. But, Peter, the question that I have here is: If we stay at \$550 million, will any reputable Fed watchers say we've loosened?

CHAIRMAN GREENSPAN. Just keep the question.

MR. ANGELL. No, if we stay at \$550 million, will any--

CHAIRMAN GREENSPAN. Well, let me rephrase the question.

MR. ANGELL. No, I want the answer to my question.

CHAIRMAN GREENSPAN. I'll answer it; I will say "no."

MR. ANGELL. Okay, I agree with your answer.

CHAIRMAN GREENSPAN. Okay, I'm delighted. Let me ask you this: What do you think is the probability of having to go to \$600 million or more?

MR. ANGELL. 50/50.

CHAIRMAN GREENSPAN. What do you think the probability of having to go below \$550 million directly from here is?

MR. ANGELL. 15 percent.

CHAIRMAN GREENSPAN. It strikes me, therefore, that if you take that literally, the chances are higher that we'll go up from here rather than down.

MR. ANGELL. That's why I want to have a tilt policy.

CHAIRMAN GREENSPAN. Yes, but the point is that if that is in fact the case, the risks are very clear; and one has much more clout per unit of action by moving in advance. I must admit I'm really trying to listen to your argument and I'm having difficulty with it, because there has been a general thrust of policy here which has been extraordinarily successful. And I think what the additional \$50 million is doing is essentially ratifying that. When they ask me, do I think the world is going to come to an end at \$550 million, well, obviously not. Looking at what the markets know or what they don't know, I'm not even certain who will catch the \$50 million or not catch it. If they do catch the \$50 million, will they consider the fact that we have tightened to be something negative? That, I strongly suggest, is probably untrue. The markets in this context cannot perceive of a further slight tightening of the targets as being negative. I really can't [see it].

MR. ANGELL. Well--

CHAIRMAN GREENSPAN. Remember this economy--

MR. ANGELL. That's the reason we have a 12-member group-because some people might see it differently.

CHAIRMAN GREENSPAN. Well, I think we've conveyed our points. I will take it out on a tennis court and see if--

VICE CHAIRMAN CORRIGAN. Well, I feel sorry for that ball!

MR. HOSKINS. I would like to make just one comment. We are always discussing this in terms of the risks of having to move it up another notch. But we don't discuss the notion of suppose we went up to \$700 million, would we be willing to risk bringing the rates back down? In that context, we're some times following. I think if we thought about it another way and said yes, we can move it down as well as up--the idea being that maybe you do get out in front, and if you have made a mistake, then you'd be willing to--

MR. ANGELL. Well, --

CHAIRMAN GREENSPAN. Let me answer that, since I'm on the other side of this issue. If we were to go to \$700 million right now, I think we would be putting too much upward pressure on the exchange rate and I think that would create international problems which have the same order of magnitude as the discount rate. So, while I will argue the other side of this, I think I would also argue against that for the reasons I suggested. We still haven't heard from Presidents Boykin or Morris. If they have any inclination--

MR. BOYKIN. I would go with your prescription.

MR. MORRIS. I will too, Mr. Chairman. I would add on the discount rate that it seems to me that we ought to reserve action on the discount rate to have something in the closet that we can bring out to cope with a sharply declining dollar. I'd remind you that the last rally phase for the dollar lasted six weeks. Maybe this will be more prolonged; I rather doubt it.

MR. JOHNSON. It has been depreciating since the beginning of the year, practically. This recent surge is shorter, but the net depreciation from the beginning of the year is what Ted?

MR. TRUMAN. Oh, it's 11 or 12 percent.

MR. JOHNSON 11 or 12 percent.

 $\mbox{MR. CROSS.}$  Well, it depends on against what [the depreciation is measured].

[Secretary's note: Several people spoke at once and their comments were unintelligible.]

MR. ANGELL. Well, Frank, what are you going to do when the dollar is falling and the price of gold is soaring? And those things are there; then what do we do? Increase the discount rate?

MR. MORRIS. Yes. I think it's a very useful instrument for that kind of a situation because it's an instrument that's very visible to people abroad. And I think we could act without really fundamentally changing our monetary policy and still get some bang to the buck. Whereas if we go on aligning the discount rate to the funds rate and we do run into such a period, we don't have anything to use in that kind of a situation except intervention. I think we could support intervention with a rise in the discount rate; that would be very useful in that context if it happens.

CHAIRMAN GREENSPAN. Any other comments or is everyone getting hungry?

MR. HELLER. Yes, I have one more comment. I think it was Mr. Forrestal who suggested a slight re-ordering in the operational paragraph. Wouldn't it be appropriate on the bottom of page 19 in the last sentence, "taking account of" to move that "conditions in financial markets" [further down in the list] to be together with the reference to the foreign exchange markets? So that would read on the next page "developments in foreign exchange and domestic financial markets". That's not our top concern clearly and I'm open to whether you want inflation first or the business expansion first. I'd be happy to go along with Mr. Forrestal to put inflation first, business expansion second, and then the financial and markets together.

MR. KELLEY. I'd like to associate myself with that.

CHAIRMAN GREENSPAN. Any other comments relative to that comment?

MR. MELZER. I think it's a good idea.

SPEAKER(?). Yes, inflation ought to be first.

CHAIRMAN GREENSPAN. Well, let's vote. Let's put that in and let's stipulate for a vote that \$50 million increase in borrowing and going asymmetric. I guess the word slightly is relevant. Would you read that as revised?

MR. BERNARD. It would read, "In the implementation of policy for the immediate future, the Committee seeks to increase slightly the existing degree of pressure on reserve positions. Taking account of" --inflation first?

CHAIRMAN GREENSPAN. Do we do inflation first?

SPEAKER(?). Yes.

CHAIRMAN GREENSPAN. Let's do inflation.

MR. BERNARD. "Taking account of indications of inflationary pressures, the strength of the business expansion, developments in foreign exchange and domestic financial markets, and the behavior of the monetary aggregates, somewhat greater reserve restraint would or slightly lesser reserve restraint might be acceptable in the intermeeting period. The contemplated reserve conditions are expected to be consistent with growth of M2 and M3 over the period from June through September at annual rates of about"--someone suggested 5 but

"B" is 5-1/2-- "about 5-1/2 percent and 7 percent, respectively. The Chairman may call for Committee consultation if it appears to the Manager for Domestic Operations that reserve conditions during the period before the next meeting are likely to be associated with a federal funds rate persistently outside a range of 5 to 9 percent."

MR. KELLEY. I have a comment before we vote, if I may, for clarification.

CHAIRMAN GREENSPAN. Pardon?

MR. KELLEY. Before we vote--. As Norm just read it, the third line there would read that we were increasing pressure, which would be associated with alternative "C". The \$50 million estimate falls far short, in my view, of alternative "C". And I would not use that word.

MR. GUFFEY. It should be maintaining.

 $$\operatorname{MR}.$$  KELLEY. I would use maintain as being better associated with a \$50 million increase.

CHAIRMAN GREENSPAN. What's everyone's view?

MR. HELLER. Good point. I agree with that.

MR. ANGELL. I don't agree with that.

SPEAKER(?). We have in previous meetings.

MR. JOHNSON. We're only trying to clarify--

MR. ANGELL. We've always done it. We've always done it slightly on this, on that, on a \$50 million change.

MR. KELLEY. I would start having problems with using the language connected with alternative "C" and also using asymmetric language.

MR. JOHNSON. I was going to say something along the same lines. We are changing the borrowing number, that is true. And that normally has been associated, as Governor Angell says, with slightly.

MR. ANGELL. Slightly.

MR. JOHNSON. However, some people have a different view about how you measure reserve pressures. And if we're saying it's not going to change the funds rate--we're only changing borrowing pressure and the funds rate basically stays stable around 7-1/2 percent--total reserve pressures are not really changed in the market. All we have done is change the borrowing target; total reserves would be the same.

MR. BOEHNE. I wonder if a better way to do it would be to think of a borrowing target of \$550 to \$600 million and whether it's \$600 million or \$550 million depends on where the funds rate is. And then use the language to maintain about the existing degree of pressure.

MR. ANGELL. Well, now, I could go with that.

MR. HELLER. That's also good.

CHAIRMAN GREENSPAN. Yes, we can do that or we can basically consolidate the previous \$50 million into this language in some way. In other words--

MR. HELLER. But that's really taken [into account]; even maintain means consolidating.

CHAIRMAN GREENSPAN. Yes.

MR. KOHN. May I ask for a little clarification? I read President Boehne's language as really going to a funds rate target-

MR. GUFFEY. Yes, it sounds that way.

MR. BOEHNE. That's where you are anyway; let's don't--

MR. KOHN. Well, --

MR. BOEHNE. You want the funds rate at 7-1/2 percent--that's what people are saying.

MR. PARRY. I don't interpret it that way.

MR. GUFFEY. The borrowing level itself is not published.

CHAIRMAN GREENSPAN. That's correct, it is not.

MR. GUFFEY. It has to be interpreted by market participants. I thought that your proposal incorporated the underlying assumption that going to \$600 million gives you a 7-1/2 percent funds rate, roughly. That seems acceptable to me and that translates in my mind to maintain the current--

CHAIRMAN GREENSPAN. Why don't we say "about maintaining" then. The about seems to capture most everybody's view of it.

MR. ANGELL. Say "about"? About what? How's that read?

MR. PARRY. I've got to ask a question then. If we do that and we go to \$600 million, is there a side constraint on that?

CHAIRMAN GREENSPAN. Sorry, is there a what?

MR. PARRY. Is there a side constraint on that? In other words, if the fed funds rate does turn out to be 7-5/8 percent, is that a problem?

MS. SEGER. Or 8-1/4.

CHAIRMAN GREENSPAN. No, we have decided on going to a borrowing target.

MR. PARRY. We're on a borrowing target?

CHAIRMAN GREENSPAN. We're on a borrowing target, yes.

MR. ANGELL. But you're not going to like my explanation of my vote if you do it that way, because I'm going to say that the maintain wasn't what we did. Otherwise, I can't explain my vote.

MR. HOSKINS. He would have no way to communicate that, when he dissents on this. How's anyone going to know why he dissented unless he spells it out?

MR. ANGELL. Unless I tell something you don't want me to tell.

MR. HOSKINS. Yes. Well, you'd have to spell it out.

MR. KOHN. I think it is the case, Mr. Chairman--let's see if Peter agrees with me--that whatever we think funds are today or yesterday or the day before, that our view would be that if you stated \$550 million, funds would be just a tick lower, practically imperceptibly, but perhaps a little more perceptibly than if you were at \$600 million. I think it is a slight firming relative to what would persist if we kept the \$550 million and it's--

MR. ANGELL. Well, let's go to \$565 million then.

MR. PARRY. Are there things to say that there has been some --?

CHAIRMAN GREENSPAN. Look, I think we're getting--

MR. KOHN. It's splitting [hairs].

CHAIRMAN GREENSPAN. We are getting a little silly, gentlemen.

MR. BLACK. If you abstract from this, special pressures are factors that would push the federal funds rate up. We have, by going \$50 million higher, done a slight tightening. How's that? And I think it ought to reflect that.

MR. PARRY. Now you're talking about doing a little more.

CHAIRMAN GREENSPAN. I think it's got to have--

MR. MELZER. What did this two-week period that just ended come in at?

MR. KOHN. 7.58 percent.

CHAIRMAN GREENSPAN. 7.58 percent?

MR. KOHN. Yes.

CHAIRMAN GREENSPAN. That's the average?

MR. MELZER. No--I mean in terms of borrowing?

MR. KOHN(?). \$520 million.

MR. BLACK. \$520 million.

MR. JOHNSON. This argument really wouldn't develop if we had asymmetric language and decided to discretely move, but later. We are arguing about angels on the head of a pin here.

CHAIRMAN GREENSPAN. We really are.

MR. HOSKINS. Angels? Or devils?

MR. HELLER. What if you make it a very slight increase?

CHAIRMAN GREENSPAN. Is there a word less than slight?

MR. BOEHNE. Very slight.

CHAIRMAN GREENSPAN. No, that's fine-tuning to the point we're really--. Slight means very slight; slight means slight.

MR. ANGELL. Slight is the proper word to go to \$600 million.

MR. BOEHNE. Slight's great.

CHAIRMAN GREENSPAN. It is; really, it is. Let me put it this way: there may be some of you who have troubles. You shouldn't really, because it really is slight. I must say to you, I sympathize with the problem you're raising, but I really don't know how you get it less than slight.

SPEAKER(?). Maintain.

MR. MORRIS. And then it does--

MR. BLACK. Some of us have been suspected of slighter than--

 $\,$  CHAIRMAN GREENSPAN. The directive has been read. May I request that we vote?

MR. HOSKINS. Is it at \$600 million with slight?

MR. FORRESTAL. Increase slightly.

CHAIRMAN GREENSPAN. Yes. Does anyone wish it to be re-read for clarification?

MS. SEGER. Are you ending up with "increase" or are you ending up with "maintain"?

MR. FORRESTAL. Increase slightly.

CHAIRMAN GREENSPAN. Right. Go ahead with the vote.

## MR. BERNARD.

Chairman Greenspan Yes Vice Chairman Corrigan Yes Governor Angell No President Black Yes President Forrestal Yes Governor Heller Yes President Hoskins Yes, reluctantly Governor Johnson Governor Kelley Yes No President Parry Yes Governor Seger No

CHAIRMAN GREENSPAN. The only thing remaining on our schedule is the confirmation for the date of the next meeting, Tuesday, August 16th.

END OF MEETING